Michigan Refining Division

Marathon Petroleum Company LP

1300 South Fort Street
Detroit, MI 48217
Telephone 313/843-9100

FEDERAL EXPRESS

April 20, 2012

Ms. Wilhelmina McLemore
MDEQ – Air Quality Division
Cadillac Place
3058 West Grand Boulevard
Suite 2-300
Detroit, MI 48202

RE: First Quarter 2012 Leak Detection and Repair, Wastewater VOC, and Benzene Waste NESHAP Certification and Compliance Report

Dear Ms. McLemore:

This report is being submitted by the Michigan Refining Division of Marathon Petroleum Company LP (MPC) to fulfill the requirements of:

- The fugitive and wastewater VOC emissions monitoring program for the first quarter of 2012. This report is required by Michigan Air Rule 622, U.S. EPA's New Source Performance Standards (NSPS), and the National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries. In addition, this report contains information required by Paragraph 20Oiic of the First Modification to the November 2005 First Revised Consent Decree (CD), United States of America et. al. v. Marathon Petroleum Company LP (MPC) (Civil Action No. 4:01CV-40119-PVG), lodged February 7, 2008 and entered on March 31, 2008.
- The Benzene Waste NESHAPS Subpart FF Certification and Compliance report for the first quarter of 2012. This report is required by 40 CFR 61 Subpart FF and Paragraph 18.P.ii.b of the Consent Decree.
- January 2012 refinery installed a H2S scavenger additive system in the Rouge Tank Farm (Unit #38) that was required for the Barge Air Permit in order to meet H2S air limits. System installation included a chemical injection system for the H2S scavenger additive to the suction of the barge loading pumps, an isotainer for chemical storage, pumping system and safety shower. This system has been added to the LDAR monitoring program and will be monitored under GGGa.

The attached tables include information necessary for compliance with these requirements.

Table 1 lists MPC process units (NSPS VV Section 60.487 (c)(1)) and summarizes the process unit shutdowns that occurred during this quarter (NSPS VV Section 60.487 (c)(3)). Table 1 also includes the approximate number of components present in each unit at the beginning and ending of the reporting period (NSPS VV Section 60.487(c)(4)).

Table 2 lists the components found leaking and an exceedance summary for various pieces of control equipment or treatment processes during this quarter and the dates of repair (NSPS VV Section 60.487(c)(2) and 40 CFR 61.357(d)(7)).

Table 3 lists leaking components on delay of repair (NSPS VV Section 60.487(c)(2)). This information is also required by Paragraph 20.O.ii.c.2.f of the CD.

Table 4 includes information satisfying NSPS Subpart QQQ (Section 60.698(c)) requirements.

This table summarizes drain and junction box inspections that identified seals with low water level or other problems that could result in VOC emissions. In addition, subsequent corrective actions and/or repairs are identified. All required inspections for the QQQ standards have been completed as required.

Table 5 presents measures that MPC took to satisfy Paragraphs 20.O.ii.c.1 and 18.P.ii.b of the CD.

Table 6 lists specific monitoring information as required per Paragraph 20.O.ii.c.2.a–e of the CD.

Table 7 contains the certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61.357(d)(6).

Table 8 contains the exceedance summary for various pieces of control equipment or treatment processes as required in 40 CFR 61.357(d)(7) and 4 0CFR 60.692-5(e)(5).

Table 9 contains the End of Line calculation as required per Paragraph 18.K.iii and 18.P.ii.b of the CD. The refinery received written approval of the End of Line Sampling Plan on March 8, 2010.

Table 10 includes information satisfying Benzene Waste NESHAP Subpart FF (Section 61.357(d)(8)) requirements.

This table summarizes all inspections required by 40 CFR 61.342 through 61.354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified. Additionally, subsequent corrective actions and/or repairs are identified.

Please contact Ms. Kristen Schnipke (313) 297-4750 or Mr. Greg Shay (313) 297-6115 if you have any questions concerning this submittal.

Sincerely,

Marathon Petroleum Company LP

By: MPC Investment LLC, General Partner

Mr. C.T. Case, Deputy Assistant Secretary

Attachments

cc: (2) U.S. EPA, Director of Regulatory Enforcement c/o Matrix Environmental and Geotechnical – *Federal Express*
(2) Air and Radiation Division, U.S. EPA Region 5 –*Federal Express*
(2) Office of Regional Counsel, U.S. EPA Region 5 – *Federal Express*

MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
AIR QUALITY DIVISION

RENEWABLE OPERATING PERMIT REPORT CERTIFICATION

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Natural Resources and Environment, Air Quality Division upon request.

Source Name: Marathon Petroleum Company LP County: Wayne

Source Address: 1300 South Fort Street City: Detroit

AQD Source ID (SRN): A9831 ROP No.: 199700013c ROP Section No.: 01

Please check the appropriate box(es):

☐ **Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From _____ To _____

☐ 1. During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.

☐ 2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

☐ **Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From _____ To _____

☐ 1. During the entire reporting period, **ALL** monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.

☐ 2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

☒ **Other Report Certification**

Reporting period (provide inclusive dates): From 1/1/2012 To 3/31/2012

Additional monitoring reports or other applicable documents required by the ROP are attached as described:

First Quarter Leak Detection and Repair, Benzene Waste NESHAP and QQQ Report

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

C.T. Case	MPC Investment LLC, its General Partner Deputy Assistant Secretary	(313)843-9100
Name of Responsible Official (print or type)	Title	Phone Number

C T Case

Signature of Responsible Official

4-24-12

Date

* Photocopy this form as needed.

EQP 5736 (Rev 2-10)

Table 1
Component Summary - First Quarter 2012
Michigan Refining Division

Complex	Unit	Description	Approximate Number of Components						Dates of Shutdown
			Pumps		Valves		Compressors		
			12/31/2011	3/31/2012	12/31/2011	3/31/2012	12/31/2011	3/31/2012	
1	4	Vacuum Unit	5	5	459	495	2	2	
	5	Crude Unit	31	32	2,136	2,335	0	0	
	29	Wastewater Plant	17	16	729	729	0	0	
2	7	Distillate Hydrotreater Unit	20	20	1,300	1,310	3	3	3/12-19/2012
	8	Gas Oil Hydrotreater Unit	5	5	1,562	1,719	2	2	
	9	Alkylation Unit	29	30	2,063	2,081	1	1	
3	11	Fluid Catalytic Cracking Unit	6	6	490	484	0	0	
	13	Propylene Unit	9	9	692	699	3	3	
	12 21	Gas Con/SATS Depropanizer/Treaters	27	27	1,982	1,982	2	2	
4	14	Continuous Catalytic Reformer Unit	14	14	2,071	2,071	2	2	
	16	Naphtha Hydrotreater Unit	23	23	1,743	1,969	0	0	
	19	Kerosene Hydrotreater Unit	8	8	685	691	1	1	
5	1	Crude Tank Farm	24	24	829	833	0	0	
	2	LPG Tank Farm	20	20	2,152	2,154	0	0	
	3/4	CP/Melvindale Tank Farms	25	26	1,560	1,521	0	0	
	38	Rouge Terminal	NA	2	NA	50	0	0	
		Light Products Terminal	18	15	888	808	0	0	

Table 2
Leakers Detected During First Quarter 2012
Michigan Refining Division

Month	Complex	Unit	VOC Tag I.D.	Component Type	Date Leak Detected	Date of Repair*

SEE ATTACHED TABLE

*R/D = Repair Delay S/D = Shutdown Required

MARATHON - DETROIT
1300 SOUTH FORT STREET
DETROIT, MI 48217

04/12/2012

LEAKING EQUIPMENT LOG

Program: NSPS-VV

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 01

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
1634	VALVE/ ORBIT	8.00	MANNINO PIT SW OF TK 40								
				02/01/2012	M21	51800 PPM	VLV-PKG	02/07/2012	VLV-TP	141.00	
				02/07/2012	M21	141 PPM					02/07/2012
1884	VALVE/ ORBIT	6.00	KVP BLEND PIT W OF CATWALK								
				02/03/2012	M21	24700 PPM	VLV-PKG	02/03/2012	VLV-CL	65100.00	
				02/03/2012	M21	65100 PPM		02/06/2012	VLV-INJ	206.00	
				02/06/2012	M21	206 PPM					02/06/2012
2032	VALVE/ GATE	8.00	30' EAST OF TK30 TRANSFER LINE TO TK118								
				02/01/2012	M21	18700 PPM	VLV-PKG	02/06/2012	VLV-TP	13.00	
				02/06/2012	M21	13 PPM					02/06/2012

LEAKING EQUIPMENT LOG

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 01

Compliance Group : 29

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2192	PUMP	0.00	W of carbon can station 11 in API	03/27/2012	M21	29100 PPM	PMP-SEAL	03/27/2012	PMP-WSE	10200.00	
				03/27/2012	M21	10200 PPM		03/27/2012	PMP-WSE	0.00	
				03/27/2012	VIS	F		03/28/2012	PMP-WSE	16.00	
				03/28/2012	M21	16 PPM					
				04/03/2012	VIS	P					04/03/2012

Process Unit 01 Summary

	Component Count	Leak Count
Total in Group	4	4
Total Valves	3	3
Total Pumps	1	1
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2366	VALVE/ BALL	3.00	15FT SW OF TK98 @UG-5-009 DOT LINE								
				01/19/2012	M21	13600 PPM	VLV-BON	01/19/2012	VLV-CAP	11500.00	
				01/19/2012	M21	11500 PPM		02/01/2012	VLV-CAP	0.00	
				02/01/2012	VIS	P					
				02/01/2012	M21	52 PPM					02/01/2012
2366	VALVE/ BALL	3.00	15FT SW OF TK98 @UG-5-009 DOT LINE								
				03/21/2012	M21	11300 PPM	VLV-BON	03/21/2012	VLV-CL	14900.00	
				03/21/2012	M21	14900 PPM		03/27/2012	VLV-INJ	185.00	
				03/27/2012	M21	185 PPM					03/27/2012
2767	VALVE/ ORBIT	4.00	TOP OF TK98. 1FT S OF CATWALK.								
				03/02/2012	M21	51400 PPM	VLV-PKG	03/02/2012	VLV-CL	71400.00	
				03/02/2012	M21	71400 PPM		03/05/2012	TBL	8.00	
				03/05/2012	M21	8 PPM					03/05/2012
2969	VALVE/ ORBIT	3.00	8FT SW OF TK 89 ON SUCT LN OF PUMP 22-P-41								
				03/05/2012	M21	30500 PPM	VLV-PKG	03/06/2012	VLV-INJ	4.00	
				03/06/2012	M21	4 PPM					03/06/2012
2993	PUMP	0.00	SW OF TK 89 SEAL OF PUMP 22-P-37								
				03/05/2012	M21	11500 PPM	PMP-SEAL	03/06/2012	PMP-WSE	2800.00	
				03/06/2012	M21	2800 PPM					03/06/2012
2998	PUMP	0.00	7FT SW OF TK 89 PUMP 22-P-36 SEAL								
				02/23/2012	M21	38600 PPM	PMP-SEAL	02/24/2012	PMP-WSE	240.00	
				02/24/2012	M21	240 PPM					
				03/02/2012	VIS	P					
				03/05/2012	VIS	P					
				03/05/2012	M21	14.57 PPM					03/05/2012
3109	VALVE/ CHECK	4.00	BTM SSD OF TK 92 7FT E OF TK 91								
				03/06/2012	M21	13800 PPM	VLV-PLUG	03/06/2012	VLV-CL	15400.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				03/06/2012	M21	15400 PPM		03/07/2012	VLV-TPLG	6100.00	
				03/07/2012	M21	6100 PPM					03/07/2012
3195	VALVE/ ORBIT	3.00	SSD TOP OF BULLET TK 94 N OF CATWALK								
				03/06/2012	M21	56700 PPM	VLV-PKG	03/06/2012	VLV-CL	65600.00	
				03/06/2012	M21	65600 PPM		03/08/2012	VLV-TP	45.00	
				03/08/2012	M21	45 PPM					03/08/2012
3221	VALVE/ ORBIT	3.00	SSD OF BULLET TK 93 ON TOP 7FT E OF TK 92								
				01/19/2012	M21	42200 PPM	VLV-PKG	01/19/2012	VLV-CP	29600.00	
				01/19/2012	M21	29600 PPM		01/20/2012	VLV-TP	45.00	
				01/20/2012	M21	45 PPM					01/20/2012
3344	VALVE/ SWING	3.00	BTM SSD OF BULLET 95 10FT E OF BULLET 94								
				03/07/2012	M21	14200 PPM	VLV-SCR	03/07/2012	VLV-CL	13800.00	
				03/07/2012	M21	13800 PPM		03/08/2012	VLV-TPLG	8400.00	
				03/08/2012	M21	8400 PPM					03/08/2012
3762	VALVE/ ORIFIC	0.75	IN PIPERACK 20FT NW OF 22V5.								
				03/07/2012	M21	11200 PPM	VLV-BON	03/08/2012	VLV-TBON	140.00	
				03/08/2012	M21	140 PPM					03/08/2012
3889	VALVE/ ORBIT	6.00	TOP OF TK87 W SDE								
				03/14/2012	M21	11700 PPM	VLV-PKG	03/14/2012	VLV-CL	11000.00	
				03/14/2012	M21	11000 PPM		03/15/2012	VLV-TP	65.00	
				03/15/2012	M21	65 PPM					03/15/2012
3918	VALVE/ REGUL	1.00	SE SDE OF TK87 @ CEMENT COLUMN	*** Placed on Delay for Turnaround on 12/16/2011 Removed From Turnaround List on 01/19/2012							
				12/02/2011	M21	31800 PPM	VLV-BON	12/02/2011	VLV-CL	276300.00	
				12/02/2011	M21	276300 PPM		12/06/2011	VLV-CL	20000.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				12/06/2011	M21	20000 PPM		01/19/2012	VLV-RV	4.79	
				01/19/2012	M21	4.79 PPM					01/19/2012
3958	PUMP	0.00	22P87 12' W OF TK80								
				03/14/2012	VIS	F	PMP-SCR	03/14/2012	PMP-TFI	5500.00	
				03/14/2012	M21	5500 PPM		03/14/2012	PMP-TFI	5500.00	
				03/14/2012	M21	5500 PPM		03/14/2012	PMP-TFI	20000.00	
				03/15/2012	M21	20000 PPM		03/15/2012	PMP-TFI	0.00	
				03/22/2012	VIS	P					
				03/28/2012	VIS	P					
				04/04/2012	VIS	P					
				04/11/2012	VIS	F					03/22/2012
3976	PUMP	0.00	PUMP 22P86 12' W OF TK80								
				02/23/2012	M21	21300 PPM	PMP-PHS	02/23/2012	PMP-WSE	32100.00	
				02/23/2012	M21	32100 PPM		02/24/2012	PMP-WSE	134.00	
				02/24/2012	M21	134 PPM					02/24/2012
3977	VALVE/ ORBIT	4.00	PUMP 22P86 SUCTION LINE 12' W OF TK80								
				01/19/2012	M21	19700 PPM	VLV-PKG	01/19/2012	VLV-CP	48700.00	
				01/19/2012	M21	48700 PPM		01/20/2012	VLV-TP	278.00	
				01/20/2012	M21	278 PPM					01/20/2012
3977	VALVE/ ORBIT	4.00	PUMP 22P86 SUCTION LINE 12' W OF TK80								
				02/23/2012	VIS	F	VLV-PKG	02/23/2012	VLV-CL	28500.00	
				02/23/2012	M21	28500 PPM					
				02/23/2012	M21	76000 PPM		02/24/2012	VLV-TP	6.00	
				02/24/2012	M21	6 PPM					
				02/24/2012	VIS	P					02/24/2012
3977	VALVE/ ORBIT	4.00	PUMP 22P86 SUCTION LINE 12' W OF TK80								
				03/15/2012	M21	57700 PPM	VLV-PKG	03/15/2012	VLV-CL	119600.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				03/15/2012	M21	119600 PPM		03/16/2012	VLV-INJ	23.00	
				03/16/2012	M21	23 PPM					03/16/2012
4061	VALVE/ ORBIT	6.00	S SIDE TK83 TOP BLK								
				02/23/2012	VIS	F	VLV-PKG	02/23/2012	VLV-CL	11000.00	
				02/23/2012	M21	11000 PPM					
				02/23/2012	M21	14200 PPM		02/24/2012	VLV-TP	126.00	
				02/24/2012	M21	126 PPM					
				02/24/2012	VIS	P					02/24/2012

Process Unit 02 Summary

	Component Count	Leak Count
Total in Group	15	19
Total Valves	12	15
Total Pumps	3	4
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 04

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
1-01172	VALVE	0.75	W SDE 4H1 @ FUEL GAS LNE BRNR# 12								
				03/08/2012	M21	575 PPM	VLV-PLUG	03/08/2012	VLV-CL	586.00	
				03/08/2012	M21	586 PPM		03/09/2012	VLV-TPLG	2.00	
				03/09/2012	M21	2 PPM					03/09/2012
27930	VALVE	4.00	SW 4H1 HTR @ FUEL GAS CNTRL LP 4PV311								
				03/08/2012	M21	788 PPM	VLV-PKG	03/08/2012	VLV-TP	169.00	
				03/08/2012	M21	169 PPM					03/08/2012
30502	VALVE	0.50	SE OF 4H1 HTR @ FUEL GAS CNTRL LP								
				03/08/2012	M21	608 PPM	VLV-PKG	03/08/2012	VLV-TP	591.00	
				03/08/2012	M21	591 PPM		03/09/2012	VLV-TP	118.00	
				03/09/2012	M21	118 PPM					03/09/2012

Process Unit 04 Summary

	Component Count	Leak Count
Total in Group	3	3
Total Valves	3	3
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 05

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
1-00639	VALVE	0.50	E OF CNTRL RM ALLEYWAY NAPHTHA MANIFLD @ FLW MTR								
				03/14/2012	M21	11000 PPM	VLV-SCR	03/14/2012	VLV-CL	8261.00	
				03/14/2012	M21	8261 PPM					03/14/2012
1-00639	VALVE	0.50	E OF CNTRL RM ALLEYWAY NAPHTHA MANIFLD @ FLW MTR								
				03/15/2012	M21	10000 PPM	VLV-SCR	03/15/2012	VLV-CL	112.00	
				03/16/2012	M21	112 PPM		03/16/2012	VLV-TFIT T		03/16/2012
27472	VALVE	0.75	E OF CNTRL RM LVL 1 STRUCT ORF OH CNTRL LP N OF 5V4								
				03/14/2012	M21	17000 PPM	VLV-PLUG	03/14/2012	VLV-CL	3264.00	
				03/14/2012	M21	3264 PPM					03/14/2012

Process Unit 05 Summary

	Component Count	Leak Count
Total in Group	2	3
Total Valves	2	3
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 07

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
10104	VALVE	3.00	CNTRL LOOP 07PC707 W OF 7V12								
				03/22/2012	M21	11600 PPM	VLV-PKG	03/23/2012	VLV-TP	119.00	
				03/23/2012	M21	119 PPM					03/23/2012
2-01149	PUMP/ CENTRIF	0.00	7P11 RECONTACTING PUMP-07-07								
				01/19/2012	M21	10700 PPM	PMP-SEAL	01/19/2012	PMP-WSE	3811.00	
				01/19/2012	M21	3811 PPM					01/19/2012

Process Unit 07 Summary

	Component Count	Leak Count
Total in Group	2	2
Total Valves	1	1
Total Pumps	1	1
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 08

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
8675	VALVE/ NEEDLE	0.50	NORTHEAST OF 8V2 DPCELL 4/4								
				02/13/2012	M21	19800 PPM	VLV-PKG	02/13/2012	VLV-CL	4792.00	
				02/13/2012	M21	4792 PPM					02/13/2012
8675	VALVE/ NEEDLE	0.50	NORTHEAST OF 8V2 DPCELL 4/4								
				02/15/2012	M21	10000 PPM	VLV-PKG	02/15/2012	VLV-TP	111.00	
				02/22/2012	M21	111 PPM		02/22/2012	VLV-TP		02/22/2012

Process Unit 08 Summary

	Component Count	Leak Count
Total in Group	1	2
Total Valves	1	2
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
09C1	COMPRESSOR/ CENTRIFUGE	0.00	9C1 ALKY COMPRESSOR	*** Placed on Delay for Turnaround on 11/23/2009							
				11/12/2009	M21	11300 PPM	COM-CSE AL	11/17/2009	CMP-WO	15000.00	
				11/17/2009	M21	15000 PPM					
				12/29/2009	M21	4964 PPM					
				01/14/2010	M21	11245 PPM		01/14/2010	VLV-SEJ	9911.00	
				01/14/2010	M21	9911 PPM					
				02/03/2010	M21	10253 PPM		02/03/2010	VLV-SEJ	9856.00	
				02/03/2010	M21	9856 PPM					
				03/23/2010	M21	1563 PPM					
				04/30/2010	M21	155 PPM					
				05/23/2010	M21	331 PPM		06/30/2010	CMP-WO	1601.00	
				06/30/2010	M21	1601 PPM					
				07/15/2010	M21	178 PPM					
				08/24/2010	M21	53.8 PPM					
				09/29/2010	M21	164 PPM					
				10/06/2010	M21	208 PPM		11/30/2010	CMP-WO	2313.00	
				11/30/2010	M21	2313 PPM					
				11/30/2010	M21	3411 PPM		01/14/2011	CMP-WO	2404.00	
				01/14/2011	M21	2404 PPM					
				01/14/2011	M21	29.88 PPM					
				02/17/2011	M21	140 PPM					
				04/26/2011	M21	20.18 PPM					
				05/04/2011	M21	1748 PPM					
				06/20/2011	M21	1291 PPM					
				07/11/2011	M21	70.24 PPM		08/17/2011	CMP-WO	100000.00	
				08/17/2011	M21	100000 PPM					

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				08/17/2011	M21	102000 PPM		09/29/2011	CMP-WO	75000.00	
				09/29/2011	M21	75000 PPM					
				09/29/2011	M21	198700 PPM		10/10/2011	CMP-WO	79400.00	
				10/10/2011	M21	79400 PPM					
				10/10/2011	M21	133200 PPM		11/30/2011	CMP-WO	110400.00	
				11/30/2011	M21	110400 PPM					
				11/30/2011	M21	124500 PPM		12/15/2011	CMP-WO	144900.00	
				12/15/2011	M21	144900 PPM					
				12/15/2011	M21	18800 PPM		01/03/2012	CMP-WO	17900.00	
				01/03/2012	M21	17900 PPM					
				01/03/2012	M21	207500 PPM					
				02/14/2012	M21	959 PPM		03/21/2012	COM-ST EAM	231600.00	
				03/21/2012	M21	231600 PPM					
				03/21/2012	M21	14700 PPM		04/04/2012	CMP-WO	73100.00	
				04/04/2012	M21	73100 PPM					
				04/04/2012	M21	84800 PPM					
10598	VALVE	0.00	TOP 9V18 S SIDE PLTFRM.	01/04/2012	M21	10000 PPM	VLV-PLUG	01/04/2012	VLV-CL	45.15	
				01/04/2012	M21	45.15 PPM					01/04/2012
10599	VALVE/ BLEEDER	0.75	TOP 9V18 S SIDE PLTFRM.								

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
10599	VALVE/ BLEEDER	0.75	TOP 9V18 S SIDE PLTFRM.								
				01/04/2012	M21	18100 PPM	VLV-PLUG	01/05/2012	VLV-TPLG	20000.00	
				01/05/2012	M21	20000 PPM		01/12/2012	VLV-TCON	14.00	
				01/13/2012	M21	14 PPM		01/13/2012	VLV-PLU		01/13/2012
12953	VALVE/ BLEEDER	0.75	TOP MIDDLE E SIDE 9E7A								
				01/05/2012	M21	147000 PPM	VLV-PLUG	01/05/2012	VLV-CL	49800.00	
				01/05/2012	M21	49800 PPM		01/10/2012	VLV-TPLG	31.00	
				01/10/2012	M21	31 PPM					01/10/2012
14392	PUMP	0.00	6/0 9P1B								
				02/14/2012	VIS	F	PMP-SEAL	02/14/2012	PMP-WSE	11400.00	
				02/14/2012	M21	11400 PPM					
				02/14/2012	M21	16100 PPM		02/16/2012	PMP-WSE	45.00	
				02/16/2012	M21	45 PPM					02/16/2012
14392	PUMP	0.00	6/0 9P1B								
				03/21/2012	M21	36700 PPM	PMP-SEAL	03/21/2012	PMP-WSE	23700.00	
				03/21/2012	M21	23700 PPM		03/21/2012	PMP-WSE	0.00	
				03/21/2012	VIS	F		03/22/2012	PMP-WSE	10.00	
				03/22/2012	M21	10 PPM					
				03/28/2012	VIS	P					03/28/2012
15601	VALVE/ BALL	1.00	TOP PLATFORM E OF 9V18.	*** Placed on Delay for Turnaround on 01/06/2012							
				01/04/2012	M21	84700 PPM	VLV- SGL	01/04/2012	VLV-TCO	25.42	

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
15601	VALVE/ BALL	1.00	TOP PLATFORM E OF 9V18.	*** Placed on Delay for Turnaround on 01/06/2012							
									N		
				02/29/2012	M21	25.42 PPM					
				03/21/2012	M21	56.29 PPM		04/04/2012	VLV-CL	3956.00	
				04/04/2012	M21	3956 PPM					
				04/04/2012	M21	3275 PPM					
17873	PUMP	0.00	6/0 9P3B								
				03/21/2012	M21	22300 PPM	PMP-SEAL	03/21/2012	PMP-WS E	87500.00	
				03/21/2012	M21	87500 PPM					
				03/21/2012	VIS	P		03/22/2012	PMP-ST M	108.00	
				03/22/2012	M21	108 PPM					
				03/28/2012	VIS	P					03/28/2012
17874	PUMP	0.00	6/0 9P3A								
				03/21/2012	M21	26500 PPM	PMP-SEAL	03/21/2012	PMP-WS E	10700.00	
				03/21/2012	M21	10700 PPM					
				03/21/2012	VIS	P		03/22/2012	PMP-WS E	87.00	
				03/22/2012	M21	87 PPM					
				03/28/2012	VIS	P					03/28/2012
19465	VALVE/ GATE	6.00	6/4 SUCT 9P4B								
				01/03/2012	M21	121000 PPM	VLV-PKG	01/03/2012	VLV-TP	18600.00	
				01/03/2012	M21	18600 PPM		01/04/2012	VLV-TP	206.00	
				01/04/2012	M21	206 PPM					01/04/2012
2-00590	VALVE	0.50	SESDE 9E36 @ORF								
				01/03/2012	M21	20000 PPM	VLV-PKG	01/03/2012	VLV-TP	823.00	
				01/03/2012	M21	823 PPM					01/03/2012

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2-01000	VALVE	2.00	@ CNTRL LOOP 10FT N OF 9E30.								
				01/03/2012	M21	11600 PPM	VLV-PKG	01/03/2012	VLV-CP	11600.00	
				01/03/2012	M21	11600 PPM		01/03/2012	VLV-CL	125.00	
				01/03/2012	M21	125 PPM		01/03/2012	VLV-TP		01/03/2012
2-01720	VALVE/ CTRL	2.00	CV 9PC0523 ON W SDE OF 9E21								
				01/03/2012	M21	23100 PPM	VLV-PKG	01/04/2012	VLV-CP	28.00	
				01/04/2012	M21	28 PPM					01/04/2012
2-01924	VALVE	0.50	CNTRL LOOP W OF 9V16								
				01/04/2012	M21	18200 PPM	VLV-PKG	01/04/2012	VLV-TP	128.00	
				01/04/2012	M21	128 PPM					01/04/2012
2-01924	VALVE	0.50	CNTRL LOOP W OF 9V16								
				02/14/2012	M21	28200 PPM	VLV-PKG	02/14/2012	VLV-CL	19800.00	
				02/14/2012	M21	19800 PPM		02/16/2012	VLV-CP	154.00	
				02/16/2012	M21	154 PPM					02/16/2012
2-01924	VALVE	0.50	CNTRL LOOP W OF 9V16								
				03/21/2012	M21	18200 PPM	VLV-PKG	03/21/2012	VLV-CL	17600.00	
				03/21/2012	M21	17600 PPM		03/23/2012	VLV-RP	208.00	
				03/23/2012	M21	208 PPM					03/23/2012
20225	PUMP	0.00	6/0 9P6								
				01/03/2012	VIS	F	PMP-TUB	01/03/2012	PMP-WSE	65800.00	
				01/03/2012	M21	65800 PPM					
				01/03/2012	M21	18900 PPM		01/04/2012	PMP-WSE	23000.00	
				01/04/2012	M21	23000 PPM		01/11/2012	PMP-TFI	0.00	
				01/11/2012	VIS	F		01/17/2012	PMP-TFI	0.00	
				01/17/2012	VIS	P					
				01/17/2012	M21	52 PPM					01/17/2012
20225	PUMP	0.00	6/0 9P6								
				02/15/2012	M21	20000 PPM	PMP-SEAL	02/15/2012	PMP-WS	0.00	

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
20225	PUMP	0.00	6/0 9P6						E		
				02/21/2012	VIS	P		02/28/2012	PMP-SEJ	1297.00	
				02/28/2012	M21	1297 PPM					02/28/2012
21789	VALVE	0.00	BTM NSDE 9E35								
				01/05/2012	M21	62900 PPM	VLV-PLUG	01/05/2012	VLV-CL	8144.00	
				01/05/2012	M21	8144 PPM					01/05/2012
24110	VALVE/ BALL	0.00	SMPLSTAT 5FT N OF 9E35 REPLACEMENT IN KIND WITH TAG 33460 *** Placed on Delay for Turnaround on 01/23/2009 Removed From Turnaround List on 11/29/2010								
				04/22/2009	M21	35600 PPM	VLV-BON	04/22/2009	VLV-TBO N	31100.00	
				04/22/2009	M21	31100 PPM		05/28/2009	VLV-TBO N	1260.00	
				05/28/2009	M21	1260 PPM					
				06/29/2009	M21	623 PPM		06/29/2009	VLV-TBO N	610.00	
				06/29/2009	M21	610 PPM					
				07/16/2009	M21	3616 PPM		07/16/2009	VLV-TBO N	1267.00	
				07/16/2009	M21	1267 PPM					
				08/17/2009	M21	2294 PPM		08/17/2009	VLV-TBO N	2065.00	
				08/17/2009	M21	2065 PPM					
				09/14/2009	M21	5222 PPM		09/14/2009	VLV-TBO N	4830.00	
				09/14/2009	M21	4830 PPM					
				10/14/2009	M21	4 PPM					
				11/20/2009	M21	46 PPM					
				12/10/2009	M21	46 PPM					
				01/12/2010	M21	189 PPM					

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				02/02/2010	M21	3 PPM		03/23/2010	VLV-TBON	774.00	
				03/23/2010	M21	774 PPM					
				03/23/2010	M21	931 PPM					
				04/18/2010	M21	17.41 PPM					
				05/23/2010	M21	1531 PPM		06/30/2010	VLV-TBON	2264.00	
				06/30/2010	M21	2264 PPM					
				06/30/2010	M21	1955 PPM		07/07/2010	VLV-TBON	2815.00	
				07/07/2010	M21	2815 PPM		07/07/2010	VLV-TBON	2730.00	
				07/07/2010	M21	2730 PPM					
				08/24/2010	M21	144 PPM		09/21/2010	VLV-CL	460.00	
				09/21/2010	M21	460 PPM					
				09/21/2010	M21	156 PPM					
				10/03/2010	M21	74.22 PPM		11/29/2010	VLV-RV	2.00	
				11/29/2010	M21	2 PPM					
26147	VALVE/ ORBIT	6.00	SE SIDE 9E10B								
				01/03/2012	M21	29700 PPM	VLV-PKG	01/04/2012	VLV-TP	79.00	
				01/04/2012	M21	79 PPM					01/04/2012
27200	VALVE/ BALL	0.25	SMPLSTAT 5FT N OF 9E35 REPLACEMENT IN KIND WITH TAG 33459 *** Placed on Delay for Turnaround on 01/23/2009 Removed From Turnaround List on 11/29/2010								
				04/22/2009	M21	12500 PPM	VLV-BON	04/22/2009	VLV-TBON	954.00	
				05/28/2009	M21	954 PPM		05/28/2009	VLV-TBON	986.00	
				06/29/2009	M21	986 PPM		06/29/2009	VLV-TBON	900.00	
				06/29/2009	M21	900 PPM					

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				07/20/2009	M21	16 PPM					
				08/17/2009	M21	36 PPM					
				09/14/2009	M21	37 PPM					
				10/14/2009	M21	42 PPM					
				11/20/2009	M21	43 PPM					
				12/10/2009	M21	41 PPM					
				01/12/2010	M21	21 PPM					
				02/02/2010	M21	3 PPM					
				03/23/2010	M21	46.49 PPM					
				04/18/2010	M21	52.12 PPM					
				05/23/2010	M21	26.37 PPM					
				06/30/2010	M21	37.23 PPM		07/07/2010	VLV-TBON	434.00	
				07/07/2010	M21	434 PPM					
				07/07/2010	M21	64.78 PPM					
				08/24/2010	M21	47.85 PPM					
				09/21/2010	M21	181 PPM					
				10/03/2010	M21	19.44 PPM		11/29/2010	VLV-RV	4.00	
				11/29/2010	M21	4 PPM					
32659	VALVE/ GATE	0.75	9V40 NE UP PLTF @ 6" LINE OUT OF TOP OF VSL								
				01/02/2012	M21	10200 PPM	VLV-SCR	01/02/2012	VLV-CL	10100.00	
				01/02/2012	M21	10100 PPM		01/03/2012	VLV-TFITT	36.00	
				01/03/2012	M21	36 PPM					01/03/2012
34657	VALVE/ NEEDLE	0.50	G/3 WSDE PMP 9P4A								
				01/03/2012	M21	13700 PPM	VLV-PKG	01/03/2012	VLV-TP	30.62	
				01/03/2012	M21	30.62 PPM					01/03/2012

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
40255	VALVE	0.00	EAST of 9e15 water boot								
				01/02/2012	M21	54800 PPM	VLV-BON	01/02/2012	VLV-CL	9173.00	
				01/02/2012	M21	9173 PPM					01/02/2012
40257	VALVE	0.75	DIB OVHD SMPL STATION NE OF 9E10B								
				01/03/2012	M21	132900 PPM	VLV-BON	01/03/2012	VLV-CL	30300.00	
				01/03/2012	M21	30300 PPM		01/04/2012	VLV-CL	29.00	
				01/04/2012	M21	29 PPM					01/04/2012
40257	VALVE	0.75	DIB OVHD SMPL STATION NE OF 9E10B								
				02/14/2012	M21	52800 PPM	VLV-TUB	02/14/2012	VLV-CL	32900.00	
				02/14/2012	M21	32900 PPM		02/15/2012	VLV-TFIT T	44.00	
				02/15/2012	M21	44 PPM					02/15/2012
40258	VALVE/ NEEDLE	0.25	DIB OVHD SMPL STATION NE OF 9E10B								
				01/03/2012	M21	71300 PPM	VLV-TUB	01/03/2012	VLV-CL	10200.00	
				01/03/2012	M21	10200 PPM		01/04/2012	VLV-CL	44.00	
				01/04/2012	M21	44 PPM					01/04/2012
40258	VALVE/ NEEDLE	0.25	DIB OVHD SMPL STATION NE OF 9E10B								
				02/14/2012	M21	23600 PPM	VLV-TUB	02/14/2012	ATSC	4504.00	
				02/14/2012	M21	4504 PPM					02/14/2012
40311	VALVE/ CTRL	3.00	CV 9LC0534 CNTLP BTW 9P1B & 9P55								
				01/03/2012	M21	62500 PPM	VLV-PKG	01/03/2012	VLV-TP	35400.00	
				01/03/2012	M21	35400 PPM		01/04/2012	VLV-CP	278.00	
				01/04/2012	M21	278 PPM					01/04/2012
40344	VALVE	0.00	SESDE 9E36 @DPCELL								
				02/14/2012	VIS	F	VLV-PKG	02/14/2012	VLV-CL	22000.00	
				02/14/2012	M21	22000 PPM		02/14/2012	VLV-CL	10100.00	
				02/14/2012	M21	10100 PPM		02/15/2012	VLV-TFIT	2500.00	

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
									T		
				02/15/2012	M21	2500 PPM		02/24/2012	VLV-RV	27.00	
				02/24/2012	M21	27 PPM					
				02/24/2012	VIS	P					
				02/24/2012	M21	0 PPM					02/24/2012
40843	VALVE/ CTRL	0.25	CNTLP E OF 9E25 #LC552								
				01/04/2012	M21	107000 PPM	VLV-PKG	01/04/2012	VLV-CL	135500.00	
				01/04/2012	M21	135500 PPM		01/05/2012	VLV-TP	170.00	
				01/05/2012	M21	170 PPM					01/05/2012

Process Unit 09 Summary

	Component Count	Leak Count
Total in Group	26	32
Total Valves	21	25
Total Pumps	4	6
Total Compressors	1	1
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
14512	VALVE	0.75	12V41 LVL3 LVL VLM - TOP BV @ SG	*** Placed on Delay for Turnaround on 02/16/2012							
				02/02/2012	M21	42500 PPM	VLV- SGL	02/02/2012	VLV-CL	86400.00	
				02/02/2012	M21	86400 PPM		02/08/2012	VLV-CL	8800.00	
				02/08/2012	M21	8800 PPM					02/08/2012
15368	VALVE/ GATE	0.50	@ 12P166 W SIDE 50FT S OF 12V5								
				02/06/2012	M21	10600 PPM	VLV-TUB	02/06/2012	VLV-CL	13100.00	
				02/06/2012	M21	13100 PPM		02/07/2012	VLV-TFIT	28.00	
				02/07/2012	M21	28 PPM					02/07/2012
23780	VALVE/ GATE	2.00	G/6 VENT ON CNLP E OF 21V39								
				02/06/2012	M21	149700 PPM	VLV-PKG	02/06/2012	VLV-TP	111400.00	
				02/06/2012	M21	111400 PPM		02/08/2012	VLV-TP	38.00	
				02/08/2012	M21	38 PPM					02/08/2012
24342	VALVE/ GATE	0.50	EL 7 FT 1 FT E OF 12P137 - N PRESS TAP REPLACEMENT IN KIND WITH TAG 33421	*** Placed on Delay for Turnaround on 08/31/2007 Removed From Turnaround List on 11/23/2010							
				08/18/2007	M21	26200 PPM	VLV-SCR	08/18/2007	VLV-WOW	26200.00	
				08/18/2007	M21	26200 PPM					
				08/18/2007	M21	26200 PPM					
				09/27/2007	M21	14900 PPM					
				10/31/2007	M21	801 PPM					
				11/05/2007	M21	88000 PPM		11/05/2007	VLV-TPLG	60000.00	
				11/05/2007	M21	60000 PPM					
				11/29/2007	M21	60000 PPM					
				12/28/2007	M21	91 PPM		01/31/2008	VLV-TFIT	4850.00	
				01/31/2008	M21	4850 PPM					
				02/07/2008	M21	1521 PPM		02/07/2008	VLV-TFIT	2269.00	

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
									T		
				02/07/2008	M21	2269 PPM					
				05/29/2008	M21	35 PPM					
				08/13/2008	M21	23 PPM					
				09/11/2008	M21	7 PPM					
				10/21/2008	M21	3642 PPM		10/21/2008	VLV-TPL G	584.00	
				10/21/2008	M21	584 PPM					
				11/24/2008	M21	128400 PPM		11/24/2008	VLV-TPL G	218400.00	
				11/24/2008	M21	218400 PPM					
				12/17/2008	M21	8 PPM					
				01/27/2009	M21	106 PPM					
				02/05/2009	M21	991559 PPM		02/05/2009	VLV-TPL G	990016.00	
				02/05/2009	M21	990016 PPM					
				03/02/2009	M21	3552 PPM		03/02/2009	VLV-TFIT T	3421.00	
				03/02/2009	M21	3421 PPM					
				04/30/2009	M21	12 PPM					
				05/04/2009	M21	126200 PPM		05/04/2009	VLV-TPL G	124000.00	
				05/04/2009	M21	124000 PPM					
				06/22/2009	M21	17 PPM					
				07/31/2009	M21	13 PPM					
				08/05/2009	M21	28 PPM					
				09/23/2009	M21	78400 PPM		09/23/2009	VLV-TPL	22300.00	

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
									G		
				09/23/2009	M21	22300 PPM					
				10/28/2009	M21	2017 PPM		10/28/2009	VLV-TPL G	4520.00	
				10/28/2009	M21	4520 PPM					
				11/17/2009	M21	21333 PPM		11/17/2009	VLV-TPL G	19884.00	
				11/17/2009	M21	19884 PPM					
				12/30/2009	M21	14230 PPM		12/30/2009	VLV-TPL	18962.00	
				12/30/2009	M21	18962 PPM					
				01/26/2010	M21	11520 PPM		01/26/2010	VLV-TIG	8963.00	
				01/26/2010	M21	8963 PPM					
				02/02/2010	M21	51 PPM					
				03/10/2010	M21	19.46 PPM		04/14/2010	VLV-TPL G	4360.00	
				04/14/2010	M21	4360 PPM					
				05/12/2010	M21	8505 PPM					
				06/29/2010	M21	1.75 PPM		07/30/2010	VLV-TPL G	3443.00	
				07/30/2010	M21	3443 PPM		07/30/2010	VLV-TPL G	2148.00	
				07/30/2010	M21	2148 PPM		08/17/2010	VLV-TPL G	27300.00	
				08/17/2010	M21	27300 PPM		08/17/2010	VLV-TPL G	15800.00	
				08/17/2010	M21	15800 PPM		09/24/2010	VLV-TP	897.00	
				09/24/2010	M21	897 PPM					
				09/24/2010	M21	187 PPM					
				10/09/2010	M21	58.74 PPM		11/23/2010	VLV-TP	2.00	

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				11/23/2010	M21	2 PPM					
24343	VALVE/ GATE	0.50	EL 7 FT 1 FT E OF 12P137 - S PRESS TAP REPLACEMENT IN KIND WITH TAG 33422	*** Placed on Delay for Turnaround on 08/31/2007 Removed From Turnaround List on 11/23/2010							
				08/18/2007	M21	36300 PPM	VLV-PLUG				
				08/18/2007	M21	36300 PPM		08/18/2007	VLV-TPLG	36300.00	
				08/18/2007	M21	36300 PPM					
				09/27/2007	M21	156200 PPM					
				10/31/2007	M21	42000 PPM					
				11/05/2007	M21	89300 PPM		11/05/2007	VLV-TPLG	357400.00	
				11/05/2007	M21	357400 PPM					
				12/28/2007	M21	33900 PPM		12/28/2007	VLV-TPLG	13900.00	
				12/28/2007	M21	13900 PPM		01/31/2008	VLV-TFITT	24000.00	
				01/31/2008	M21	24000 PPM					
				02/07/2008	M21	30500 PPM		02/07/2008	VLV-TFITT	58600.00	
				02/07/2008	M21	58600 PPM		03/31/2008	VLV-WOW	588600.00	
				03/31/2008	M21	588600 PPM					
				04/28/2008	M21	20500 PPM		04/28/2008	VLV-TPLG	14800.00	
				04/28/2008	M21	14800 PPM					
				05/29/2008	M21	133 PPM					
				06/26/2008	M21	12600 PPM		06/26/2008	VLV-TPLG	22000.00	

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				06/26/2008	M21	22000 PPM					
				07/10/2008	M21	3 PPM					
				08/13/2008	M21	115 PPM					
				09/11/2008	M21	7 PPM					
				10/21/2008	M21	59500 PPM		10/21/2008	VLV-TPLG	84800.00	
				10/21/2008	M21	84800 PPM					
				11/24/2008	M21	149200 PPM		11/24/2008	VLV-TPLG	147000.00	
				11/24/2008	M21	147000 PPM					
				12/17/2008	M21	10 PPM					
				01/27/2009	M21	35 PPM					
				02/05/2009	M21	855000 PPM		02/05/2009	VLV-TPLG	851999.00	
				02/05/2009	M21	851999 PPM					
				03/20/2009	M21	544 PPM		03/20/2009	VLV-TGAUGE	753600.00	
				03/20/2009	M21	753600 PPM					
				04/30/2009	M21	24 PPM					
				05/04/2009	M21	302186 PPM		05/04/2009	VLV-TPLG	168236.00	
				05/04/2009	M21	168236 PPM					
				06/22/2009	M21	15 PPM					
				07/31/2009	M21	15 PPM					
				08/05/2009	M21	26300 PPM		08/05/2009	VLV-TPLG	8848.00	

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				08/05/2009	M21	8848 PPM					
				09/23/2009	M21	33900 PPM		09/23/2009	VLV-TPLG	2363.00	
				09/23/2009	M21	2363 PPM					
				10/28/2009	M21	948 PPM		10/28/2009	VLV-TPLG	1647.00	
				10/28/2009	M21	1647 PPM					
				11/17/2009	M21	66000 PPM		11/17/2009	VLV-TGAUGE	44569.00	
				11/17/2009	M21	44569 PPM					
				12/30/2009	M21	8200 PPM		12/30/2009	VLV-TPL	6415.00	
				12/30/2009	M21	6415 PPM					
				01/26/2010	M21	7233 PPM		01/26/2010	VLV-TPL	5122.00	
				01/26/2010	M21	5122 PPM					
				02/02/2010	M21	17 PPM					
				03/10/2010	M21	18.99 PPM		04/14/2010	VLV-TPLG	20000.00	
				04/14/2010	M21	20000 PPM					
				05/12/2010	M21	1317 PPM					
				06/29/2010	M21	185 PPM					
				07/28/2010	M21	73100 PPM		08/17/2010	VLV-TPLG	4321.00	
				08/17/2010	M21	4321 PPM		09/24/2010	VLV-TFITT	3601.00	
				09/24/2010	M21	3601 PPM					
				09/24/2010	M21	2843 PPM					
				10/09/2010	M21	51.32 PPM		11/23/2010	VLV-RV	2.00	
				11/23/2010	M21	2 PPM					

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
25318	VALVE	4.00	12E12 S END								
				02/02/2012	M21	18900 PPM	VLV-FLG	02/02/2012	VLV-CAP	19600.00	
				02/02/2012	M21	19600 PPM		02/08/2012	VLV-CL	167.00	
				02/08/2012	M21	167 PPM					02/08/2012
25319.01	CONNECTOR/ FLANGE	0.75	12E13 S END								
				02/02/2012	VIS	F	CON-FLG	02/02/2012	CON-CLA	24200.00	
				02/02/2012	M21	24200 PPM					
				02/02/2012	M21	28500 PPM		02/08/2012	CON-CLA	165.00	
				02/08/2012	M21	165 PPM					
				02/08/2012	VIS	P					02/08/2012
25399	VALVE/ CTRL	4.00	G 1/10 on PlATFRM aBOVE 12v36 @12V10 LVL 1 CTRL LOOP 12PC0261								
				02/07/2012	M21	18100 PPM	VLV-PKG	02/07/2012	VLV-CL	16200.00	
				02/07/2012	M21	16200 PPM		02/08/2012	VLV-TP	216.00	
				02/08/2012	M21	216 PPM					02/08/2012
26111	VALVE/ GATE	0.50	@ CNTRL LOOP N OF 12V5								
				02/06/2012	M21	157100 PPM	VLV-SCR	02/06/2012	VLV-CP	68900.00	
				02/06/2012	M21	68900 PPM		02/07/2012	VLV-TFIT T	18.00	
				02/07/2012	M21	18 PPM					02/07/2012
28218	PUMP	0.00	12P145B								
				03/22/2012	M21	10000 PPM	PMP-SCR	03/22/2012	PMP-TFI	0.00	
				03/26/2012	VIS	P		03/27/2012	PMP-TFL G	6.00	
				03/27/2012	M21	6 PPM					03/27/2012
3-00384	VALVE	2.00	12V1 LVL1 LVL CLM - BV								
				02/06/2012	M21	22000 PPM	VLV-PKG	02/08/2012	VLV-TP	56.00	
				02/08/2012	M21	56 PPM					02/08/2012

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
3-00444	VALVE/ CTRL	2.00	12P165/166 CLP12FC0308								
				01/20/2012	M21	16700 PPM	VLV-PKG	01/20/2012	VLV-CL	12.00	
				01/24/2012	M21	12 PPM		01/24/2012	VLV-TP		01/24/2012
3-00732	VALVE	0.75	CTRL LOOP S PF 21V3								
				02/03/2012	M21	18200 PPM	VLV-CONNEC	02/03/2012	VLV-CL	22000.00	
				02/03/2012	M21	22000 PPM		02/08/2012	VLV-TGAUGE	363.00	
				02/08/2012	M21	363 PPM					02/08/2012
3-01583	VALVE/ GATE CS	8.00	8" GATE IN FLOOR/C3/C4 OVHD OVHD COOLER-12-12-12								
				02/02/2012	M21	68500 PPM	VLV-FLG	02/02/2012	VLV-CAP	44100.00	
				02/02/2012	M21	44100 PPM		02/10/2012	VLV-TFLG	370.00	
				02/10/2012	M21	370 PPM					02/10/2012
3-01822	VALVE/ GATE	3.00	1/1 21V3 REPLACEMENT IN KIND WITH TAG 33424	*** Placed on Delay for Turnaround on 09/05/2007 Removed From Turnaround List on 11/23/2010							
				08/21/2007	M21	184900 PPM	VLV-PKG	08/21/2007	VLV-TP	184900.00	
				08/21/2007	M21	184900 PPM					
				08/21/2007	M21	38000 PPM		08/28/2007	VLV-INJ	39000.00	
				08/28/2007	M21	39000 PPM		08/28/2007	VLV-INJ	38000.00	
				08/28/2007	M21	38000 PPM					
				09/12/2007	M21	38000 PPM					
				10/31/2007	M21	1938 PPM					
				11/06/2007	M21	601 PPM		11/06/2007	VLV-TIG	1334.00	
				11/06/2007	M21	1334 PPM					
				11/29/2007	VIS	F					
				11/29/2007	M21	9520 PPM					
				12/07/2007	VIS	P					

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				12/28/2007	M21	155 PPM					
				02/07/2008	M21	606 PPM		02/07/2008	VLV-TIG	789.00	
				02/07/2008	M21	789 PPM					
				05/23/2008	M21	898 PPM		05/23/2008	VLV-TGA UGE	1833.00	
				05/23/2008	M21	1833 PPM					
				08/13/2008	M21	1435 PPM		08/13/2008	VLV-TGA UGE	404.00	
				08/13/2008	M21	404 PPM					
				09/11/2008	M21	30 PPM					
				10/21/2008	M21	1211 PPM		10/21/2008	VLV-TGA UGE	1072.00	
				10/21/2008	M21	1072 PPM					
				11/11/2008	M21	18 PPM					
				12/17/2008	M21	8 PPM					
				01/27/2009	M21	29 PPM					
				02/17/2009	M21	850 PPM		02/17/2009	VLV-TGA UGE	1110.00	
				02/17/2009	M21	1110 PPM					
				03/20/2009	M21	2019 PPM		03/20/2009	VLV-TGA UGE	1513.00	
				03/20/2009	M21	1513 PPM					
				04/30/2009	M21	23 PPM					
				05/06/2009	M21	2605 PPM		05/06/2009	VLV-TGA UGE	3027.00	
				05/06/2009	M21	3027 PPM					
				06/22/2009	M21	15 PPM					
				07/31/2009	M21	897 PPM		07/31/2009	VLV-TGA UGE	923.00	

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				07/31/2009	M21	923 PPM					
				08/06/2009	M21	1438 PPM		08/06/2009	VLV-TGA UGE	2226.00	
				08/06/2009	M21	2226 PPM					
				09/23/2009	M21	1469 PPM		09/23/2009	VLV-TGA UGE	705.00	
				09/23/2009	M21	705 PPM					
				10/28/2009	M21	6 PPM					
				11/17/2009	M21	657 PPM		11/17/2009	VLV-TGA UGE	772.00	
				11/17/2009	M21	772 PPM					
				12/30/2009	M21	909 PPM		12/30/2009	VLV-TIG	652.00	
				12/30/2009	M21	652 PPM					
				01/26/2010	M21	547 PPM		01/26/2010	VLV-TIG	544.00	
				01/26/2010	M21	544 PPM					
				02/10/2010	M21	128 PPM					
				03/10/2010	M21	27.39 PPM		04/14/2010	VLV-TP	2200.00	
				04/14/2010	M21	2200 PPM					
				05/10/2010	M21	653 PPM					
				06/29/2010	M21	187 PPM		07/30/2010	VLV-TP	571.00	
				07/30/2010	M21	571 PPM		07/30/2010	VLV-TP	625.00	
				07/30/2010	M21	625 PPM		08/17/2010	VLV-TP	518.00	
				08/17/2010	M21	518 PPM		08/17/2010	VLV-TP	450.00	
				08/17/2010	M21	450 PPM					
				09/24/2010	M21	1.8 PPM		10/07/2010	VLV-TP	591.00	
				10/07/2010	M21	591 PPM					
				10/07/2010	M21	543 PPM		11/23/2010	VLV-RV	2.00	
				11/23/2010	M21	2 PPM					

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
33537	VALVE/ CTRL	4.00	CTRL LP E OF 12C8 PLTFM 12UC0418	*** Placed on Delay for Turnaround on 11/22/2011							
				01/20/2012	M21	82400 PPM	VLV-PKG	01/20/2012	VLV-CP	50100.00	
				01/20/2012	M21	50100 PPM		02/03/2012	VLV-CL	13600.00	
				02/03/2012	M21	13600 PPM					
				02/03/2012	M21	10500 PPM					
				03/21/2012	M21	87.13 PPM					
34167	VALVE	2.00	12V26 LVL2 SW SIDE - 12FC0306 - SATS DEPROP NET OVHD LIQUID								
				02/07/2012	M21	35500 PPM	VLV-PKG	02/07/2012	VLV-CL	974.00	
				02/07/2012	M21	974 PPM					02/07/2012
41484	PUMP	0.00	@ 12P166. S OF 12V5 50FT.								
				02/06/2012	M21	10100 PPM	PMP-TUB	02/06/2012	PMP-TFI	0.00	
				02/06/2012	VIS	F		02/07/2012	PMP-TFI	0.00	
				02/07/2012	VIS	P					
				02/07/2012	M21	84 PPM					02/07/2012

Process Unit 12-21 Summary

	Component Count	Leak Count
Total in Group	18	18
Total Valves	15 (13)	15
Total Pumps	2	2
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	1	1
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 13

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
13854	VALVE	0.50	DEETH REFLUX D.P. CELL AND ORFICE-13-13-13-13-13								
				01/20/2012	M21	45800 PPM	VLV-PKG	01/20/2012	VLV-CL	25400.00	
				01/20/2012	M21	25400 PPM		02/03/2012	VLV-TP	75.00	
				02/03/2012	M21	75 PPM					02/03/2012
13864	VALVE/ NEEDLE	0.25	13E4 SMPL PNL								
				02/23/2012	M21	18300 PPM	VLV-CONNEC	02/23/2012	VLV-CL	238600.00	
				02/23/2012	M21	238600 PPM		02/24/2012	VLV-CL	8.00	
				02/24/2012	M21	8 PPM					02/24/2012
14992	VALVE	0.75	NE SDE 13E3B								
				03/19/2012	M21	12300 PPM	VLV-SCR	03/19/2012	VLV-CL	12900.00	
				03/19/2012	M21	12900 PPM		03/20/2012	VLV-TPLG	15.00	
				03/20/2012	M21	15 PPM					03/20/2012
15060	VALVE	0.75	W OF 13E4 CTRL LP 13FC470								
				03/20/2012	M21	12000 PPM	VLV-PLUG	03/21/2012	VLV-TPLG	13.00	
				03/21/2012	M21	13 PPM					03/21/2012
19901	VALVE	0.75	NE OF 13E3A ON PLATFORM								
				03/19/2012	M21	31900 PPM	VLV-SCR	03/19/2012	VLV-CL	324400.00	
				03/19/2012	M21	324400 PPM		03/20/2012	VLV-TCON	10000.00	
				03/20/2012	M21	10000 PPM					
24769	VALVE/ GATE	0.75	CNTLP 4' E 13E3A @ ORIFACE								
				03/19/2012	M21	15500 PPM	VLV-PLUG	03/20/2012	VLV-TPLG	130.00	
				03/20/2012	M21	130 PPM					03/20/2012

LEAKING EQUIPMENT LOG

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 13

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
3-00288	PUMP	0.00	13P295								
				01/20/2012	M21	62300 PPM	PMP-SCR	01/20/2012	PMP-STM	11400.00	
				01/20/2012	M21	11400 PPM		01/24/2012	PMP-TFI	10000.00	
				01/24/2012	M21	10000 PPM					
				01/24/2012	VIS	P					
				01/30/2012	VIS	P		01/31/2012	PMP_RFIT	14.00	
				01/31/2012	M21	14 PPM		01/31/2012	PMP-SEJ	14.00	
				01/31/2012	M21	14 PPM					01/31/2012
40363	VALVE/ BALL	0.75	E SDE 13E3A TOP SG								
				02/23/2012	M21	17100 PPM	VLV-CONNEC	02/23/2012	VLV-CL	298700.00	
				02/23/2012	M21	298700 PPM		02/24/2012	VLV-TCON	5300.00	
				02/24/2012	M21	5300 PPM					02/24/2012
41355	PUMP	0.00	13P294								
				01/20/2012	M21	14200 PPM	PMP-SCR	01/20/2012	PMP-STM	21600.00	
				01/20/2012	M21	21600 PPM		01/24/2012	PMP-TFI	4700.00	
				01/24/2012	M21	4700 PPM					
				01/24/2012	VIS	P					01/24/2012

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 13

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed

Process Unit 13 Summary

	Component Count	Leak Count
Total in Group	9	9
Total Valves	7	7
Total Pumps	2	2
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 14

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
23189	VALVE	0.75	SE SDE 14C3 OVHD	01/06/2012	M21	100000 PPM	VLV-TUB	01/06/2012	VLV-CAP	100000.00	
				01/06/2012	M21	100000 PPM		01/06/2012	VLV-TCON	3471.00	
				01/06/2012	M21	3471 PPM		01/06/2012	VLV-SEJ	2.00	
				01/06/2012	M21	2 PPM					01/06/2012
23296	VALVE	0.75	L3 PLAT ABOVE COMP DECK	01/06/2012	M21	10600 PPM	VLV-FLG	01/18/2012	VLV-TFLG	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	2 PPM					01/18/2012

Process Unit 14 Summary

	Component Count	Leak Count
Total in Group	2	2
Total Valves	2	2
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 16

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
6570	VALVE/ BLEEDER	0.75	10' EAST OF 16H3 REBOILER ON CONTROL LOOP 16PC0518								
				01/20/2012	M21	5766 PPM	VLV-PLUG	01/20/2012	VLV-CL	1284.00	
				01/20/2012	M21	1284 PPM					
				01/20/2012	M21	4629 PPM		01/24/2012	VLV-TPLG	6.00	
				01/24/2012	M21	6 PPM					01/24/2012
6639	VALVE/ GATE	1.00	NHT CHG HTR 16H4 BTM FUEL LP								
				02/07/2012	M21	27200 PPM	VLV-PKG	02/07/2012	VLV-CL	32200.00	
				02/07/2012	M21	32200 PPM		02/10/2012	VLV-TP	73.00	
				02/10/2012	M21	73 PPM					02/10/2012
6641	VALVE/ GATE	0.75	NHT CHG HTR 16H4 BTM FUEL LP @PI								
				02/07/2012	M21	1295 PPM	VLV-PKG	02/07/2012	VLV-CP	2866.00	
				02/07/2012	M21	2866 PPM		02/10/2012	VLV-TP	8.00	
				02/10/2012	M21	8 PPM					02/10/2012
6840	PUMP/ CENTRIF	0.00	16P98 SOUTHWEST OF 16V2								
				03/21/2012	M21	2134 PPM	PMP-SCR	03/21/2012	PMP-STM	2106.00	
				03/21/2012	M21	2106 PPM		03/22/2012	PMP-TFI	204.00	
				03/22/2012	M21	204 PPM					03/22/2012
6925	VALVE/ BLEEDER	0.75	16V2 PROD SEP H2O BOOT SG BLDR								
				02/08/2012	M21	593 PPM	VLV-PKG	02/08/2012	VLV-TP	373.00	
				02/08/2012	M21	373 PPM					02/08/2012
6925	VALVE/ BLEEDER	0.75	16V2 PROD SEP H2O BOOT SG BLDR								
				03/23/2012	M21	658 PPM	VLV-BON	03/23/2012	VLV-CL	965.00	
				03/23/2012	M21	965 PPM		03/26/2012	VLV-CL	35.00	

Process Unit : 16

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				03/26/2012	M21	35 PPM					03/26/2012
6927	VALVE/ BLEEDER	1.00	WEST OF 16V2 ON PLATFORM								
				01/20/2012	M21	79200 PPM	VLV-SCR	01/20/2012	VLV-CL	10500.00	
				01/20/2012	M21	10500 PPM					
				01/24/2012	M21	3000 PPM		01/31/2012	VLV-TFIT T	12.00	
				01/31/2012	M21	12 PPM					01/31/2012
6945	VALVE/ NEEDLE	0.25	10' SOUTH OF 16P86 DP CELL @ PILLAR								
				01/20/2012	M21	20100 PPM	VLV-SCR	01/20/2012	VLV-CL	41100.00	
				01/20/2012	M21	41100 PPM		01/24/2012	VLV-CL	54.00	
				01/24/2012	M21	54 PPM					01/24/2012
7014	VALVE/ CTRL	8.00	CONTROL LOOP 16FC0746 EAST SIDE OF 16E9								
				02/08/2012	M21	615 PPM	VLV-PKG	02/08/2012	VLV-CL	659.00	
				02/08/2012	M21	659 PPM		02/10/2012	VLV-CP	104.00	
				02/10/2012	M21	104 PPM					02/10/2012
7014	VALVE/ CTRL	8.00	CONTROL LOOP 16FC0746 EAST SIDE OF 16E9								
				03/23/2012	M21	1259 PPM	VLV-PKG	03/23/2012	VLV-CL	1542.00	
				03/23/2012	M21	1542 PPM		03/26/2012	VLV-CP	82.00	
				03/26/2012	M21	82 PPM					03/26/2012
7060	VALVE/ NEEDLE	0.50	SOUTH SIDE OF PUMP 16P271 ON DISCHARGE LINE @ GAUGE								
				01/20/2012	M21	1334 PPM	VLV-TUB	01/20/2012	VLV-CL	1002.00	
				01/20/2012	M21	1002 PPM		01/24/2012	VLV-CL	200.00	
				01/24/2012	M21	200 PPM					01/24/2012
7230	PUMP	0.00	PUMP 16P299A NHT REFLUX SE 16V4								
				02/10/2012	M21	3201 PPM	PMP-SEAL	02/10/2012	PMP-WS	5931.00	

Process Unit : 16

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
7230	PUMP	0.00	PUMP 16P299A NHT REFLUX SE 16V4								
									E		
				02/10/2012	M21	5931 PPM					
				02/13/2012	VIS	P		02/13/2012	PMP-WS E	197.00	
				02/13/2012	M21	197 PPM					02/13/2012
7230	PUMP	0.00	PUMP 16P299A NHT REFLUX SE 16V4								
				03/23/2012	M21	5325 PPM	PMP-SCR	03/23/2012	PMP-WS E	3413.00	
				03/23/2012	M21	3413 PPM		03/26/2012	PMP-TIG	20.00	
				03/26/2012	M21	20 PPM					
				03/26/2012	VIS	P					03/26/2012
7247	VALVE/ CTRL	3.00	CONTROL LOOP 16FC0051 EAST OF 16P299A								
				02/10/2012	M21	13700 PPM	VLV-PKG	02/10/2012	VLV-CL	12300.00	
				02/10/2012	M21	12300 PPM		02/13/2012	VLV-CP	2.00	
				02/13/2012	M21	2 PPM					02/13/2012
7291	VALVE/ CTRL	4.00	CONTROL LP 16FC0678 10' SOUTH OF 16V3								
				02/09/2012	M21	888 PPM	VLV-PKG	02/09/2012	VLV-CL	1116.00	
				02/09/2012	M21	1116 PPM		02/13/2012	VLV-CP	27.00	
				02/13/2012	M21	27 PPM					02/13/2012
7291	VALVE/ CTRL	4.00	CONTROL LP 16FC0678 10' SOUTH OF 16V3								
				03/23/2012	M21	1065 PPM	VLV-PKG	03/23/2012	VLV-CL	877.00	
				03/23/2012	M21	877 PPM		03/26/2012	VLV-CP	35.00	
				03/26/2012	M21	35 PPM					03/26/2012
7313	VALVE/ BALL CHECK	0.75	L1 16V3 @ SIGHTGLASS								
				01/20/2012	M21	1812 PPM	VLV-SCR	01/20/2012	VLV-CL	1076.00	
				01/20/2012	M21	1076 PPM		01/24/2012	VLV-CL	182.00	
				01/24/2012	M21	182 PPM					01/24/2012

Process Unit : 16

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
7317	VALVE/ BALL CHECK	0.75	L1 16V3 UPPER BALL CHECK ON EAST SIGHT GLASS								
				02/09/2012	M21	4292 PPM	VLV-CONNEC	02/09/2012	VLV-CL	24300.00	
				02/09/2012	M21	24300 PPM		02/13/2012	VLV-TCON	28.00	
				02/13/2012	M21	28 PPM					02/13/2012
7544	VALVE/ CTRL	8.00	EAST OF BW BOILER @ FUEL GAS LINE. 27FC0035								
				02/09/2012	M21	759 PPM	VLV-PKG	02/09/2012	VLV-CL	656.00	
				02/09/2012	M21	656 PPM		02/13/2012	VLV-CP	198.00	
				02/13/2012	M21	198 PPM					02/13/2012
7544	VALVE/ CTRL	8.00	EAST OF BW BOILER @ FUEL GAS LINE. 27FC0035								
				03/26/2012	M21	802 PPM	VLV-PKG	03/26/2012	VLV-CL	755.00	
				03/26/2012	M21	755 PPM		03/27/2012	VLV-TP	19.00	
				03/27/2012	M21	19 PPM					03/27/2012
7630	VALVE/ BLEEDER	0.75	@ CNTRL LOOP N OF 25V2 FLARE K.O. POT.								
				02/09/2012	M21	508 PPM	VLV-PKG	02/09/2012	VLV-TP	98.10	
				02/09/2012	M21	98.1 PPM					02/09/2012
7682	VALVE/ BLEEDER	0.50	20FT NE OF CP FLARE.								
				02/24/2012	M21	2619 PPM	VLV-PKG	02/24/2012	VLV-TP	108.00	
				02/24/2012	M21	108 PPM					02/24/2012
7686	VALVE/ BLEEDER	0.75	20FT NE OF CP FLARE.								
				02/24/2012	M21	5811 PPM	VLV-PKG	02/24/2012	VLV-TP	5487.00	
				02/24/2012	M21	5487 PPM		02/27/2012	VLV-TP	2.00	
				02/27/2012	M21	2 PPM					02/27/2012

Process Unit : 16

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
7949	VALVE/ BALL	0.25	MSAT HNS REFLUX SAMP STAT 20FT W OF 16E17								
				02/14/2012	M21	2392 PPM	VLV-CONNEC	02/14/2012	VLV-CL	3583.00	
				02/14/2012	M21	3583 PPM		02/15/2012	VLV-CL	217.00	
				02/15/2012	M21	217 PPM					02/15/2012
8040	VALVE/ GATE	0.75	MSAT 16V15 HNS OVHD RECV SG TOP								
				01/20/2012	M21	8299 PPM	VLV-PLUG	01/20/2012	VLV-CL	2445.00	
				01/20/2012	M21	2445 PPM		01/24/2012	VLV-TPLG	54.00	
				01/24/2012	M21	54 PPM					01/24/2012

Process Unit 16 Summary

	Component Count	Leak Count
Total in Group	20	25
Total Valves	18	22
Total Pumps	2	3
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 19

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
0632	VALVE/ BALL	0.75	19V7 KO DRUM SG TOP BV								
				01/10/2012	M21	1922 PPM	VLV-SCR	01/10/2012	VLV-CL	10700.00	
				01/10/2012	M21	10700 PPM		01/11/2012	VLV-TFIT T	23.00	
				01/11/2012	M21	23 PPM					01/11/2012
0632	VALVE/ BALL	0.75	19V7 KO DRUM SG TOP BV								
				03/21/2012	M21	1698 PPM	VLV-CONNEC	03/21/2012	VLV-CL	208.00	
				03/21/2012	M21	208 PPM					03/21/2012
0703	VALVE/ GATE	1.50	S of 19V4								
				01/10/2012	M21	513 PPM	VLV-PKG	01/10/2012	VLV-CL	609.00	
				01/10/2012	M21	609 PPM		01/11/2012	VLV-CL	66.00	
				01/11/2012	M21	66 PPM					01/11/2012

Process Unit 19 Summary

	Component Count	Leak Count
Total in Group	2	3
Total Valves	2	3
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

LEAKING EQUIPMENT LOG

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 29

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
30085	VALVE/ GATE	8.00	TOP OF 29T48A								
				01/04/2012	M21	579 PPM	VLV-PKG	01/04/2012	VLV-TP	557.00	
				01/04/2012	M21	557 PPM		01/05/2012	VLV-TP	32.00	
				01/05/2012	M21	32 PPM					01/05/2012

Process Unit 29 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	1	1
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

LEAKING EQUIPMENT LOG

Reporting Period 01/01/2012 - 01/31/2012

Process Unit : 29

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
1153	VALVE/ GATE	4.00	API INTERMEDIATE E SIDE BY STAIRS								
				01/04/2012	M21	1942 PPM	VLV-PKG	01/04/2012	VLV-CP	2419.00	
				01/04/2012	M21	2419 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	27 PPM					01/18/2012
1154	VALVE/ BALL	4.00	API INTERMEDIATE E SIDE BY STAIRS								
				01/04/2012	M21	336 PPM	VLV-PKG	01/04/2012	VLV-CL	3044.00	
				01/04/2012	M21	3044 PPM					
				01/04/2012	M21	3383 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	108 PPM					01/18/2012
1155	VALVE/ GATE	4.00	API INTERMEDIATE IN MIDDLE								
				01/04/2012	M21	1471 PPM	VLV-PKG	01/04/2012	VLV-CP	2914.00	
				01/04/2012	M21	2914 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	301 PPM					01/18/2012
1156	VALVE/ GATE	4.00	API INTERMEDIATE IN MIDDLE								
				01/04/2012	M21	1367 PPM	VLV-PKG	01/04/2012	VLV-CL	1167.00	
				01/04/2012	M21	1167 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	257 PPM					01/18/2012
1157	VALVE/ GATE	4.00	API INTERMEDIATE IN MIDDLE								
				01/04/2012	M21	1539 PPM	VLV-PKG	01/04/2012	VLV-CP	2045.00	
				01/04/2012	M21	2045 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	92 PPM					01/18/2012
1160	VALVE/ GATE	4.00	API INTERMEDIATE IN MIDDLE								
				01/04/2012	M21	1764 PPM	VLV-PKG	01/04/2012	VLV-CL	2524.00	
				01/04/2012	M21	2524 PPM					
				01/04/2012	M21	708 PPM		01/18/2012	VLV-CL	0.00	

LEAKING EQUIPMENT LOG

Reporting Period 01/01/2012 - 01/31/2012

Process Unit : 29

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				01/18/2012	VIS	P					
				01/18/2012	M21	75 PPM					01/18/2012
1161	VALVE/ GATE	4.00	API INTERMEDIATE IN MIDDLE								
				01/04/2012	M21	1852 PPM	VLV-PKG	01/04/2012	VLV-CL	2293.00	
				01/04/2012	M21	2293 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	76 PPM					01/18/2012
1162	VALVE/ GATE	4.00	API INTERMEDIATE IN MIDDLE								
				01/04/2012	M21	808 PPM	VLV-PKG	01/04/2012	VLV-CL	1807.00	
				01/04/2012	M21	1807 PPM		01/18/2012	VLV-CL	0.00	
				01/18/2012	VIS	P					
				01/18/2012	M21	92 PPM					01/18/2012
30085	VALVE/ GATE	8.00	TOP OF 29T48A								
				01/04/2012	M21	579 PPM	VLV-PKG	01/04/2012	VLV-TP	557.00	
				01/04/2012	M21	557 PPM		01/05/2012	VLV-TP	32.00	
				01/05/2012	M21	32 PPM					01/05/2012

Process Unit 29 Summary

	Component Count	Leak Count
Total in Group	9	9
Total Valves	9	9
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 34

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
5881A	VALVE	6.00	NORTH SIDE OF TK126 NEAR CATWALK								
				01/16/2012	M21	11600 PPM	VLV-CAP	01/16/2012	ATTB	21400.00	
				01/16/2012	M21	21400 PPM		01/17/2012	VLV-TCAP	89.00	
				01/17/2012	M21	89 PPM					01/17/2012

Process Unit 34 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	1	1
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : TERM

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
30551	PUMP/ CENTRIF	0.00	PUMP AT AA-10 -2 TERM								
				03/27/2012	VIS	F	PMP-SEAL	03/27/2012	PMP-WS E	38200.00	
				03/27/2012	M21	38200 PPM					
				03/27/2012	M21	4216 PPM		03/28/2012	PMP-WS E	120.00	
				03/28/2012	M21	120 PPM					
				04/05/2012	VIS	P					04/05/2012

Process Unit TERM Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	0	0
Total Pumps	1	1
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Table 3
Regulatory Leakers Requiring Delay of Repair - First Quarter 2012
Michigan Refining Division

Complex	Unit	VOC Tag I.D.	Comp type	Date leak first detected	Component Description	Reason for delay of repair	Date Placed on delay of repair	Date of Actual/Anticipated Repair
2	8	8777	PSV	2/16/2012	8PSV6810	Requires unit shutdown	2/22/2012	11/30/2012
2	9	9C1	Compressor	11/12/2009	09C1 Seal leaking on East Side of housing	Requires unit shutdown	11/23/2009	10/31/2012
2	9	15601	Sightglass	12/15/2011	PLTFRM E 9V18	Requires unit shutdown	1/6/2012	10/31/2012
4	16	25599	Valve	11/20/2009	Bonnet of gate valve leaking control loop SE of 16V9	Isolated From VOC Service	12/18/2009	10/31/2012
3	12	33537	Valve	11/10/2011	Cntrl Loop East of 12C8 Platform 12UC0418	Requires unit shutdown	11/23/2011	11/30/2012
3	12	14512	Sightglass	2/2/2012	Sight Glass 3rd levl 12V41	Requires unit shutdown	2/16/2012	11/30/2012

Table 4
Wastewater System Monitoring - First Quarter 2012
Michigan Refining Division

Complex	Unit	Tag ID	Date	Service/Description	First Attempt	Recommended Fix	Final Repair	Final Repair Date
4	19	260	12/27/2011	Drain at KHT Reflux Pump (19P3B)	Add Water	Add Water	Water Added	2/22/2012
4	19	261	12/27/2011	Drain at KHT Reflux Pump (19P3A)	Add Water	Add Water	Water Added	1/24/2012
3	11	580	1/2/2012	Junction Box Southwest of Cooling Tower C in Roadway	Secure Lid	Secure Lid	Lid Secured	1/5/2012
1	4	696	1/4/2012	Drain South of 4P4A	Add Water	Add Water	Water Added	1/11/2012
1	5	003	1/4/2012	Drain 5 feet South of 5E31C	Install Plug	Install Plug	Plug Installed	1/11/2012
1	5	460	1/4/2012	Drain South Side of 5P60A	Add Water	Add Water	Water Added	1/19/2012
1	5	761	1/4/2012	Junction Box 6 feet West of 4E38A	Secure Lid	Secure Lid	Lid Secured	1/5/2012
1	5	056	1/5/2012	Drain Northeast of 5P5B	Install Plug	Install Plug	Plug Installed	1/11/2012
1	29	729	1/5/2012	Junction Box 12 feet Northwest of API Garage	Secure Lid	Secure Lid	Lid Secured	1/6/2012
5	34	384	1/9/2012	Junction Box Northeast of Tank 24 in Dike	Secure Lid	Secure Lid	Lid Secured	1/10/2012
1	5	187	1/11/2012	Drain South Side of 5P61B	Add Water	Add Water	Water Added	1/19/2012
2	7	284	1/11/2012	Area Drain North 7V100	Add Water	Add Water	Water Added	1/18/2012
2	7	311	1/11/2012	Catch Basin in Roadway South of Control Room	Add Water	Add Water	Water Added	1/18/2012
2	42	611	1/11/2012	Drain 5 feet Northwest of 42V6	Add Water	Add Water	Water Added	1/18/2012
1	4	696	1/19/2012	Drain South of 4P4A	Add Water	Add Water	Water Added	1/25/2012
4	16	887	1/30/2012	Junction Box 5 feet East of 16V16	Secure Lid	Secure Lid	Lid Secured	2/1/2012
1	29	721	2/1/2012	Junction Box N of Tank 33	Secure Lid	Secure Lid	Lid Secured	2/2/2012
3	12-21	878	2/6/2012	Drain 3 feet West of 12P144	Add Water	Add Water	Water Added	2/15/2012
4	19	261	2/6/2012	Drain at KHT Reflux Pump (19P3A)	Add Water	Add Water	Water Added	2/22/2012
1	5	056	2/8/2012	Drain NE of 5P5B	Install Plug	Install Plug	Plug Installed	2/14/2012
1	5	057	2/8/2012	Drain SE of 5P5A	Install Plug	Install Plug	Plug Installed	2/14/2012
1	5	738	2/8/2012	Drain 2 feet West of 5P4B	Add Water	Add Water	Water Added	2/14/2012
4	19	260	3/1/2012	Drain at KHT Reflux Pump (19P3B)	Work Order Written	Install Plug	Plug Installed	4/2/2012
3	12-21	337	3/5/2012	Water Sealed CB E of 12V26	Add Water	Add Water	Water Added	3/13/2012
1	5	347	3/6/2012	CB 3 feet West of E Cooling Tower	Add Water	Add Water	Water Added	3/16/2012
2	7	284	3/7/2012	Area Drain North 7V100	Add Water	Add Water	Water Added	3/15/2012
1	29	N/A	3/7/2012	DEPT SE Hatch	Tighten Hatch	Tighten Hatch	Hatch Tightened	3/16/2012
3	12-21	878	3/13/2012	Drain 3 ft West of 12P144	Add Water	Add Water	Water Added	3/20/2012
2	7	629	3/15/2012	Drain at 7V67	Install Plug	Install Plug	Plug Installed	3/21/2012
1	4	705	3/21/2012	Drain N. Side of 4C4B (Cleanout)	Install Plug	Install Plug	Plug Installed	3/27/2012
2	7	311	3/21/2012	Catch Basin in Roadway N of 7P105A	Add Water	Add Water	Water Added	3/28/2012

Table 4
Wastewater System Monitoring - First Quarter 2012
Michigan Refining Division

Complex	Unit	Tag ID	Date	Service/Description	First Attempt	Recommended Fix	Final Repair	Final Repair Date
4	16	494	3/26/2012	Drain S of 27V21	Install Plug	Install Plug	Plug Installed	4/2/2012
4	19	401	3/26/2012	Drain 25 ft E of 19V7	Add Water	Add Water	Water Added	4/2/2012
1	4	683	3/27/2012	Drain SE of 4V8	Install Plug	Install Plug	Ongoing	Ongoing
1	5	187	3/27/2012	Drain S Side of 5P61B	Add Water	Add Water	Ongoing	Ongoing
1	5	460	3/27/2012	Drain S Side of 5P60A	Add Water	Add Water	Ongoing	Ongoing
1	42	611	3/28/2012	Drain 5ft NW of 42V6	Add Water	Add Water	Water Added	Ongoing
1	29	430	3/29/2012	Drain SW of 29T42	Add Water	Add Water	Water Added	Ongoing

Table 5
NSR Consent Decree Information Paragraphs 20B and 18P - First Quarter 2012
Michigan Refining Division

Measures that MPC took during the 1st Quarter 2012 to satisfy the provisions of Paragraph 20B and 18P(ii)(b) of the NSR Consent Decree:

Subparagraph	Requirement	Measures taken
20Bi	Training for personnel newly-assigned to LDAR	Greg Shay completed training in July 2009 for LDAR.
20Bii	Annual training for regular LDAR personnel	Regular LDAR work is contracted through Emissions Monitoring Service, Inc (EMSI Inc.) and Seal-Tech. EMSI and Seal-tech trains all personnel, training records are kept on-site.
20Biii	Training for Ops/Maint personnel	Refinery employees are required to complete a yearly Environmental Awareness CBT (Computer Based Training) module. This module, includes training information on the LDAR Program, was initiated on March 12, 2002. Additionally, contractors are required to attend a safety orientation on a yearly basis which includes information on the LDAR Program.
18P(ii)(b)	Laboratory Audits	The Detroit Refinery now has the ability to use RAD, ESC Labs of Nashville, TN, and Bureau Veritas of Livonia, MI to run all BWON samples. The Detroit Refinery began using ESC Labs of Nashville, TN on June 22, 2010.
18P(ii)(b)	Training	Affected Refinery employees are required to complete a yearly Benzene Sampling CBT (Computer Based Training) module. This module, includes training information on the Benzene NESHAP Program, was initiated on August 2002.
18P(ii)(b)	EOL Sampling Results	The EOL Sampling program was approved on March 8, 2010 for the Detroit Refinery. See Table 9 for EOL calculations.

Table 6
NSR Consent Decree Information Paragraph 20Oiic(2) - First Quarter 2012
Michigan Refining Division

Complex	Unit	Description	Month monitored	# valves monitored	# pumps monitored	# compressors monitored	GGG # components leaking/quarter	GGGa # components leaking/quarter	# DTM components	Projected month of next monitoring
1	4	Vacuum Unit	Mar-12	464	5	2	na	3	2	Jun-12
	5	Crude Unit	Mar-12	2,252	32	0	2	na	15	Jun-12
	29	Wastewater Plant	Jan-12	726	16	0	na	9	0	Apr-12
2	7	Distillate Hydrotreater Unit	Mar-12	1,261	20	3	2	na	22	Jun-12
	8	Gas Oil Hydrotreater Unit	Feb-12	1,689	5	2	1	na	27	May-12
	9	Alkylation Unit	Jan-12	2,043	30	1	26	na	35	Apr-12
3	11	Fluid Catalytic Cracking Unit	Mar-12	460	6	0	0	na	4	Jun-12
	12/21	Gas Con/SATS Depropanizer	Feb-12	1,961	27	1	15	na	16	May-12
	13	Propylene Unit	Mar-12	691	9	3	9	na	4	Mar-12
4	14	Continuous Catalytic Reforming Unit	Jan-12	2,031	14	2	2	na	31	Apr-12
	16	Naphtha Hydrotreater Unit	Feb-12	1,657	19	0	na	20	27	May-12
	19	Kerosene Hydrotreater Unit	Jan-12	653	8	1	na	2	0	Apr-12
5	1	Crude Tank Farm	Feb-12	823	24	0	4	na	6	May-12
	2	LPG Tank Farm	Mar-12	2,143	20	0	15	na	10	Jun-12
	3/4	CP/Melvindale Tank Farms	Jan-12	1,510	26	0	1	na	9	Apr-12
	38	Rouge Terminal	Feb-12	50	2	0	na	1		May-12
		Light Product Terminal	Jan-12	808	15	0	1	na	0	Apr-12

GGG/GGGa leaking component counts includes; valves, pumps and compressors.

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Revised stream/equipment name/status	Required monitoring/inspections	Inspection Status	Monitoring/ inspection rule	Equipment Classification	Note No.	Visual	Method 21*
SR Platformer Aromatics Sump (aka CP Sump)	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from the CP Sump to the CP Flare Secondary Knockout Drum (25V2)	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
CP Sump Line from 14P10 to Sour Water Collection Tank (11V25) and Low Pressure Receiver (11V4)	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
CP Flare Knockout Drums - Primary (25V1) and Secondary (25V2)	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from CP Flare Knockout Drums to the Slop Tanks 23/508 or the Low Pressure Receiver (11V4)	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Alky Spent Caustic Holding Tank (9V31) to Alky Flare Knockout Drum (9V38)	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for		61.349(f)			X	
Piping from Spent Caustic Drum (21V47) to CP Flare	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from Relief Valve of Merox System to CP Flare	Do not need to monitor or inspect this piping since it's now going to the flare system. Point of generation is the Flare Knockout Drum discharge.	--	N/A	--			
Piping from Disulfide Separator (21V33 or #3 Merox) to Slop Tanks 23/508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Tanks 508 and 23	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	

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Piping from Tank 507 to Slop Tanks 508 and 23	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Gravity Drum near Tank 507 (gravity drum near Tank 59 is currently out of service)	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for		61.343(c)			X	
Tanks 29T40 and 29T41 (Permitted as QQQ tanks with external floating roofs)	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from API separator to Tanks 29T40/41	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Tanks 29T40/41 to Slop Tanks 23 and 508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Unifiner, Alkylation, GOHT, and Crude Flare Knock-Out Drums to Tanks 23 and 508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Vacuum Trucks	The cover and all openings (e.g., bungs, hatchs, and sampling ports) must be monitored initially and annually for NDE.	Conducted 2nd Quarter 2011	61.345(a)(1)(i)	Containers			X
	Each cover and all openings shall be visually inspected initially and quarterly to ensure that they are closed and gasketed properly.	Completed	61.345(b)	Containers		X	
Piping from NHT Particulate Filter Relief to Refinery Slop System	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the Disulfide Off-Gas Knockout Drum (12V36) to Refinery Slop System	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	

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Piping from the West Plant Slop System to Slop Tanks 23/508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping associated with the carbon canister stations	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Carbon Canisters	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Water Draw Covers This includes tanks in the Crude tank farm (6, 36, 39, 40, 41, 45, 46, 47, 48, 49, 53, 61, 72), CP Tank Farm (21, 57), and Melvindale Tank Farm (102, 103, 104, 105, 106, 107, etc).	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
CP Flare	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from Tank 507 to the Benzene Stripper Column	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Benzene Stripper Column (5V36)	The cover and all openings (e.g., access hatches, sampling ports, etc) must be monitored initially and annually for NDE.	Completed	61.348(a)(2)	Treatment Processes			X
	Each seal, access door, and all other openings shall be visually inspected initially and quarterly to ensure that no cracks or gaps occur and all openings are closed and gasketed properly.		61.348(e)(1)			X	
Piping from the top of the Benzene Stripper Column (5V36) to the Overhead Condensers (5E41A/B) and to the Overhead Receiver (5V37)	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Benzene Stripper overhead condensers (5E41A/B)	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from the Crude Desalters (5V31/32) to the Benzene Stripper Column (5V36)	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from the Benzene Stripper (5V36) to the Brute Force System	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Brute Force System	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	

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Tank 507	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from the Benzene Stripper Overhead Receiver (5V37) to the Crude Desalters	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
API separator, forebay, and associated equipment	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.347(a)(1)(i)(A)	Oil-Water separators			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.		61.347(b)			X	
Piping from Gravity Drum near Tank 507 to Slop Tanks 23 and 508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping at Gravity Drum near Tank 507 and piping at Tank 508 used for Vacuum Truck Operations (Gravity Drum near Tank 59 currently out of service).	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Tank 51 to Slop Tank 23/508.	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Tank 51/52	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from Tank 52 to Slop Tanks 23/508.	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from CP Flare Secondary Knockout Drum to CP Flare	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	

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Piping on Hydrocarbon/Liquid Line from CP Sump to FCCU Low Pressure Receiver or Refinery Slop System.	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from CP Flare Knockout Drums to the FCCU High and Low Pressure Slop Header	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from CP Sump to FCCU High and Low Pressure Slop Header	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from FCCU High Pressure Slop Header to High Pressure Slop Bullets	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from FCCU Low Pressure Slop Header to Low Pressure Slop Bullets	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
High and low pressure slop bullets	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Aboveground Sewer Lines from Melvindale or Crude Tank Farms to Tank 507	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the Marketing Terminal Sewer to Slop Tanks 23/508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	

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Truck Drain Downs at Terminal Loading Rack	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Aboveground piping from Truck Drain Downs to NESHAP Sump	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Terminal NESHAP Sump	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Tank 29T47	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
All piping To and From 29T47	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Spent Caustic Tank (9V10) to New Caustic Pot (9T29)	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Spent Caustic Pot 9T29	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Tank Cleanouts	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Railcars (when applicable to BWON)	The cover and all openings (e.g., bungs, hatchs, and sampling ports) must be monitored initially and annually for NDE.	Conducted 2nd Quarter 2011	61.345(a)(1)(i)	Containers			X
	Each cover and all openings shall be visually inspected initially and quarterly to ensure that they are closed and gasketed properly.	Completed	61.345(b)	Containers		X	
Frac Tanks (when applicable to BWON)	The cover and all openings (e.g., bungs, hatchs, and sampling ports) must be monitored initially and annually for NDE.	Completed	61.345(a)(1)(i)	Containers			X
	Each cover and all openings shall be visually inspected initially and quarterly to ensure that they are closed and gasketed properly.		61.345(b)	Containers		X	

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Slop Oil Drums	The cover and all openings (e.g., bungs, hatchs, and sampling ports) must be monitored initially and annually for NDE.	Completed Monthly	61.345(a)(1)(i)	Containers			X
	Each cover and all openings shall be visually inspected initially and quarterly to ensure that they are closed and gasketed properly.		61.345(b)	Containers		X	
All piping to Lab Slop Oil Tank	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Lab Slop Tank	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping at API Separator used for Vacuum Truck Operations	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Piping from Slop Tanks 23/508 to Crude Unit	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially		61.346(a)(2)			X	
Piping from Complex 1 Flare Knockout Drum to the Crude Flare.	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Crude Flare Itself	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from the Propane Caustic Scrubber 9V22 to Alky Spent Caustic Holding Tank 9V31	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the Alky Spent Caustic Holding Tank 9V31 used for Vacuum/Tank Trucks Operations	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.	Completed	61.346(a)(2)	Individual Drain System		X	
Unifiner Flare Knockout Drum	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for		61.343(c)			X	
Piping from the Unifiner Flare Knockout Drum to the Unifiner Flare	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Unifiner Flare Itself	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	

Table 7
Inspection Certification required under 40 CFR 61.537 (d) (6) Benzene Waste NESHAP - First Quarter 2012
Michigan Refining Division

GOHT Flare Knockout Drum	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for		61.343(c)			X	
Piping from the GOHT Flare Knockout Drum to the Unifiner Flare	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Alky Flare Knockout Drums	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and		61.343(c)			X	
Piping from the Alky Flare Knockout Drums to the Alky Flare	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Alky Flare Itself	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from Caustic Wash Drum (9V10) to Spent Caustic Pot (9T29)	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from SWS Feed Surge Drum to Slop Tanks 23/508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Vacuum Truck Operations at Spent Caustic Tank 21T47	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the CP Primary Flare Knockout Drum 25V1 to the Secondary Knockout Drum 25V2	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Disulfide Separator (21V33 or #3 Merox) to Spent Caustic Tank 21T47	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the Caustic Scrubber (12V5) to Slop Tanks 23/508	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	

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Inspection Certification required under 40 CFR 61.537 (d) (6) Benzene Waste NESHAP - First Quarter 2012
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Piping from the P.P Caustic Wash Tower (13V1A/B) to Spent Caustic Tank (21T47)	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Spent Caustic Tank 21T47	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from the Debutanizer Ovhd Receiver 14V7/Water KO Pot to Aromatic Sump	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the Fuel Gas Coalescers to Aromatic Sump	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Low/High Pressure Slop Bullets to LPG Knockout Pot 22-1V5	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
LPG Knockout Drum	The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) must be monitored initially and annually for NDE.	Completed	61.343(a)(1)(i)(A)	Tanks			X
	Each fixed-roof, seal, access door, and all other openings shall be visually inspected for indications of cracks, gaps, or other problems that could result in benzene emissions, and that access doors and all other openings are closed and gasketed properly.		61.343(c)			X	
Piping from LPG Knockout Pot to Unifiner Knockout Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from the Terminal NESHAP Sump to VRU or Combustor	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
VRU and Combustor	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Fugitive Emissions Eliminator	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each control device shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
RVP Analyzer	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	

Table 7
Inspection Certification required under 40 CFR 61.537 (d) (6) Benzene Waste NESHAP - First Quarter 2012
Michigan Refining Division

New Vacuum Truck Hookup at API Skim Pit	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from Spent Caustic Pot (9T29) to Vacuum Truck Hookup	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Control Devices			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.349(f)			X	
Piping from RVP Analyzer Sample to Fugitive Emissions Eliminator	Must be monitored initially and annually for NDE.	Completed	61.349(a)(1)(i)	Closed Vent System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for		61.349(f)			X	
Piping from the MVGO Filter Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Piping from the HVGO Filter Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Piping from the LVGO Filter Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Piping from the AGO Filter Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Compressor Lube Oil Filter Changeouts (7C2) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Compressor Lube Oil Filter Changeouts (8V31A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Compressor Lube Oil Filter Changeouts (8V30A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Lube Oil Filter Changeouts (9V45A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Hydraulic Oil Filter Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	

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Slurry Stripper Bottoms Strainer Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Strainer Changeouts (12V47/48) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Lube Oil Filter Changeouts (11V46A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
#6 Gas Lube Oil Filter Changeouts (12V54/55) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Lube Oil Filter Changeouts (12V45A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Lean Amine Filter Changeouts (12V45) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Lean Amine Surge Drum (12V9) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
Trim Compressor Lube Oil Filter Changeouts (13V15) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Trim Compressor Lube Oil Filter Changeouts (13V9) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Lube Oil Filter Changeouts (14ME10A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Lube Oil Filter Changeouts (14ME12A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	

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Compressor Cylinder Oil Filter Changeouts (14ME18A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Compressor Lube Oil Filter Changeouts (14ME17A/B) to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result		61.346(a)(2)			X	
NHT Naphtha Feed Filter Changeouts to Unit Area Slop Drum	The cover and all openings (e.g., access hatches, sampling ports) must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each cover seal, access hatch, and all other openings shall be visually inspected initially and quarterly thereafter to ensure that no cracks, gaps, or other problems that could result in benzene emissions occur and access hatches and other openings are closed and gasketed properly.		61.346(a)(2)			X	
Piping from Alky Spent caustic tank 9V10, 9V31, and 9V40 through refiner flare line to the flare itself	Must be monitored initially and annually for NDE.	Completed	61.346(a)(1)(i)(A)	Individual Drain System			X
	Each closed vent system shall be visually inspected initially and quarterly. Inspection shall include inspection of ductwork, piping, connections to covers and control device for evidence of visible defects.		61.346(a)(2)			X	
API Separator Floating Roof Inspections	5 year primary seal, Annual secondary seal.	Completed	61.352(a)(1)	Alternative Standards for Oil-Water separators	2		

Notes:
1. Visual inspections carried out during February 2012
2. Secondary Seal was inspected during March 2012

*Method 21 readings for valves are completed quarterly.

Table 8
Exceedance Summary for Various Control Equipment or Treatment Processes
First Quarter 2012
Michigan Refining Division

Equipment	Reporting Requirement	No. of Reportable Exceedances this Quarter	Regulation	Equipment Classification
Desalter Water Flash Column	Each period of operation during which the concentration of benzene is > or = to 10 ppm based upon monthly sampling of Desalter Water Flash Column effluent.	0	40 CFR 61.348(a)(1)(i) & 357(d)(7)(i)	Treatment Processes
Carbon Canisters	Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified.	0	40 CFR 61.357(d)(7)(iv)(I)	Closed Vent System or Control Device
		0	40 CFR 60.692-5(e)(5)	Closed Vent System or Control Device
Water Draw covers	All water draw covers associated with NESHAP program should be tightly sealed. This includes tanks in the Crude tank farm (6, 36, 39, 40, 41, 45, 46, 47, 48, 49, 53, 61, 72), CP Tank Farm (21, 57), and Melvindale Tank Farm (102, 103, 104, 105, 106, 107, 120, 125, 126, 127, 128, 133, 134, 112, 113, 114, 115, 129, 130, 176, 108, 109, 110, 116)	5	61.349(f)	Closed Vent System
Inspections[1]	Summarizes all inspections required by 61.342 through 61.354 during which detectable emissions are measured or a problem (such as a broken seal, etc.) that could result in benzene emissions, including information about the repairs or corrective action taken.	84	61.357(d)(8)	See Table 7
CP Flare	Each period in which the pilot flame of a flare is absent.	0	40 CFR 61.357(d)(7)(iv)(F)	Closed Vent System or Control Device
Unifiner Flare	Each period in which the pilot flame of a flare is absent.	0	40 CFR 61.357(d)(7)(iv)(F)	Closed Vent System or Control Device
Alkylation Flare	Each period in which the pilot flame of a flare is absent.	0	40 CFR 61.357(d)(7)(iv)(F)	Closed Vent System or Control Device
Crude Flare	Each period in which the pilot flame of a flare is absent.	0	40 CFR 61.357(d)(7)(iv)(F)	Closed Vent System or Control Device
Vapor Recovery Unit	Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device is more than 28 °C (50°F) below the design combustion zone temperature.	0	40 CFR 61.357(d)(7)(iv)(A)	Closed Vent System or Control Device
Combustor	Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a boiler or process heater having a design heat input capacity less than 44 MW, as measured by the temperature monitoring device, is more than 28°C (50°F) below the design combustion zone temperature.	0	40 CFR 61.357(d)(7)(iv)(C)	Closed Vent System or Control Device
Fugitive Emissions Eliminator	Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified.	0	40 CFR 61.357(d)(7)(iv)(I)	Closed Vent System or Control Device

Note: 1. Inspections include valves and flanges that had NDE reading above 500 ppm. If defiencies are noted, an attached summary sheet will be included.

MARATHON - DETROIT
1300 SOUTH FORT STREET
DETROIT, MI 48217

04/03/2012

LEAKING EQUIPMENT LOG

Program: NESHAPS-FF

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 01

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
1368	VALVE/ WTR DRW	6.00	NW SIDE OF TK47								
				02/01/2012	M21	836 PPM	VLV-CAP	02/01/2012	VLV-TCAP	2169.00	
				02/01/2012	M21	2169 PPM		02/07/2012	VLV-CL	60.00	
				02/07/2012	M21	60 PPM					02/07/2012

Process Unit 01 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	1	1
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

LEAKING EQUIPMENT LOG

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2365	VALVE/ BALL	4.00	5FT NW OF 22P51@UG-5-008 DOT LINE								
				03/21/2012	M21	876 PPM	VLV-PKG	03/21/2012	VLV-CL	742.00	
				03/21/2012	M21	742 PPM		03/22/2012	VLV-CP	19.00	
				03/22/2012	M21	19 PPM					03/22/2012
2366	VALVE/ BALL	3.00	15FT SW OF TK98 @UG-5-009 DOT LINE								
				01/19/2012	M21	13600 PPM	VLV-BON	01/19/2012	VLV-CAP	11500.00	
				01/19/2012	M21	11500 PPM		02/01/2012	VLV-CAP	0.00	
				02/01/2012	VIS	P					
				02/01/2012	M21	52 PPM					02/01/2012
2366	VALVE/ BALL	3.00	15FT SW OF TK98 @UG-5-009 DOT LINE								
				03/21/2012	M21	11300 PPM	VLV-BON	03/21/2012	VLV-CL	14900.00	
				03/21/2012	M21	14900 PPM		03/27/2012	VLV-INJ	185.00	
				03/27/2012	M21	185 PPM					03/27/2012
2367	VALVE/ GATE	4.00	12FT SW OF TK98 @UG-5-005 DOT LINE								
				03/21/2012	M21	702 PPM	VLV-PKG	03/21/2012	VLV-CP	675.00	
				03/21/2012	M21	675 PPM		03/22/2012	VLV-TP	109.00	
				03/22/2012	M21	109 PPM					03/22/2012
2371.01	CONNECTOR/ FLANGE	3.00	11FT NW OF 22P51@UG-5-017 DOT LINE								
				03/21/2012	M21	5171 PPM	CON-FLG	03/21/2012	CON-CLA	3560.00	
				03/21/2012	M21	3560 PPM		03/22/2012	CON-CLA	68.00	
				03/22/2012	M21	68 PPM					03/22/2012
2373	VALVE/ GATE	1.00	12FT NW OF 22P51@UG-5-018 DOT LINE								
				03/21/2012	M21	979 PPM	VLV-PKG	03/21/2012	VLV-CL	870.00	
				03/21/2012	M21	870 PPM		03/22/2012	VLV-TP	57.00	
				03/22/2012	M21	57 PPM					03/22/2012
2379	VALVE/ BALL	3.00	13FT NW OF 22P51. @ UG-5-015								
				03/21/2012	M21	1696 PPM	VLV-BON	03/21/2012	VLV-CL	1618.00	
				03/21/2012	M21	1618 PPM		03/22/2012	VLV-CL	28.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				03/22/2012	M21	28 PPM					03/22/2012
2383A	VALVE/ CHECK	6.00	3FT NW OF 22P51.NE OF CASING PRESSURE PANEL								
				03/21/2012	M21	513 PPM	VLV-FLG	03/21/2012	VLV-CL	643.00	
				03/21/2012	M21	643 PPM		03/22/2012	VLV-TFLG	78.00	
				03/22/2012	M21	78 PPM					03/22/2012
2409.04	CONNECTOR/ 45	0.75	S OF 22P51@ BTM ON FLARE LINE								
				03/29/2012	M21	1053 PPM	CON	03/29/2012	CON-CLA	1292.00	
				03/29/2012	M21	1292 PPM					
2423.06	CONNECTOR/ 90	1.00	E OF 22P50.W OF STAIRS.								
				03/29/2012	M21	22300 PPM	CON-90	03/29/2012	CON-CLA	24800.00	
				03/29/2012	M21	24800 PPM					
2423.07	CONNECTOR/ SCREWED	1.00	E OF 22P50.W OF STAIRS.								
				03/29/2012	M21	19100 PPM	CON	03/29/2012	CON-CLA	30400.00	
				03/29/2012	M21	30400 PPM					
2423.08	CONNECTOR/ UNION	1.00	E OF 22P50.W OF STAIRS.								
				03/29/2012	M21	4464 PPM	CON-UNION	03/29/2012	CON-CLA	4010.00	
				03/29/2012	M21	4010 PPM					
2423.12	CONNECTOR/ SCREWED	1.00	E OF 22P50.W OF STAIRS.								
				03/29/2012	M21	19000 PPM	CON	03/29/2012	CON-CLA	18700.00	
				03/29/2012	M21	18700 PPM					
2424.06	CONNECTOR/ 90	1.00	E OF 22P50 @ PUMPSEAL								

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2424.06	CONNECTOR/ 90	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	984 PPM	CON-90	03/29/2012	CON-CLA	1001.00	
				03/29/2012	M21	1001 PPM					
2424.07	CONNECTOR/ SCREWED	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	640 PPM	CON	03/29/2012	CON-CLA	765.00	
				03/29/2012	M21	765 PPM					
2424.08	CONNECTOR/ UNION	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	657 PPM	CON-UNIO N	03/29/2012	CON-CLA	660.00	
				03/29/2012	M21	660 PPM					
2424.09	CONNECTOR/ SCREWED	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	542 PPM	CON	03/29/2012	CON-CLA	1291.00	
				03/29/2012	M21	1291 PPM					
2424.10	CONNECTOR/ TEE-FLG	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	561 PPM	CON-TEE	03/29/2012	CON-CLA	544.00	
				03/29/2012	M21	544 PPM					
2424.11	CONNECTOR/ TEE-FLG	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	5049 PPM	CON-TEE	03/29/2012	CON-CLA	19600.00	
				03/29/2012	M21	19600 PPM					
2424.12	CONNECTOR/ TEE-FLG	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	10700 PPM	CON-TEE	03/29/2012	CON-CLA	7348.00	
				03/29/2012	M21	7348 PPM					
2424.13	CONNECTOR/ 90	1.00	E OF 22P50 @ PUMPSEAL								

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2424.13	CONNECTOR/ 90	1.00	E OF 22P50 @ PUMPSEAL								
				03/29/2012	M21	4504 PPM	CON-90	03/29/2012	CON-CLA	3497.00	
				03/29/2012	M21	3497 PPM					
2425	VALVE/ BALL	1.00	E OF 22P50.W OF STAIRS								
				03/29/2012	M21	1285 PPM	VLV-PKG	03/29/2012	VLV-CL	1392.00	
				03/29/2012	M21	1392 PPM					
2426	VALVE/ BALL	0.75	N OF 22P50.W OF STAIRS								
				03/29/2012	M21	1098 PPM	VLV-PKG	03/29/2012	VLV-CL	1602.00	
				03/29/2012	M21	1602 PPM					
2428.11	CONNECTOR/ TEE-SCR	1.00	N OF 22P50.W OF STAIRS.								
				03/29/2012	M21	2309 PPM	CON-TEE	03/29/2012	CON-CLA	1632.00	
				03/29/2012	M21	1632 PPM					
2429.01	CONNECTOR/ SCREWED	0.75	N OF 22P50.W OF STAIRS.								
				03/29/2012	M21	2861 PPM	CON-TEE	03/29/2012	CON-CLA	2707.00	
				03/29/2012	M21	2707 PPM					
2452	VALVE/ TWIN SEAL	3.00	9FT S OF TK99. DOT LINE								
				03/27/2012	M21	1516 PPM	VLV-PKG	03/27/2012	VLV-CL	680.00	
				03/27/2012	M21	680 PPM					
2459.01	CONNECTOR/ 90	1.00	12FT SE OF TK99. DOT LINE								
				03/27/2012	M21	1583 PPM	CON-90	03/27/2012	CON-CLA	252.00	
				03/27/2012	M21	252 PPM					03/27/2012
2460.01	CONNECTOR/ SCREWED	1.00	12FT SE OF TK99. DOT LINE								
				03/27/2012	M21	806 PPM	CON	03/27/2012	CON-CLA	891.00	
				03/27/2012	M21	891 PPM					

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
2461.02	CONNECTOR/ SCREWED	0.75	12FT SE OF TK99. DOT LINE								
				03/27/2012	M21	695 PPM	CON	03/27/2012	CON-CLA	685.00	
				03/27/2012	M21	685 PPM					
2497.01	CONNECTOR/ FLANGE	8.00	15FT S OF TK191.DOT LINE								
				03/27/2012	M21	999 PPM	CON-FLG	03/27/2012	CON-CLA	1712.00	
				03/27/2012	M21	1712 PPM					
2502.01	CONNECTOR/ UNION	0.75	20FT S OF TK191.DOT LINE								
				03/27/2012	M21	2011 PPM	CON-UNIO N	03/27/2012	CON-CLA	964.00	
				03/27/2012	M21	964 PPM					
2508.02	CONNECTOR/ TEE-SCR	0.50	30FT SE OF TK191.DOT LINE CORNER								
				03/27/2012	M21	2279 PPM	CON-TUB	03/27/2012	CON-CLA	2660.00	
				03/27/2012	M21	2660 PPM					
2508.03	CONNECTOR/ TEE-SCR	0.50	30FT SE OF TK191.DOT LINE CORNER								
				03/27/2012	M21	3881 PPM	CON-TUB	03/27/2012	CON-CLA	4025.00	
				03/27/2012	M21	4025 PPM					
2528	VALVE/ BALL	0.75	16FT SE OF TK191.DOT LINE.								
				03/27/2012	M21	1949 PPM	VLV-PKG	03/27/2012	VLV-CL	1403.00	
				03/27/2012	M21	1403 PPM					
2638	VALVE/ ORBIT	2.00	22P42 W OF TK 98.4FT NW OF PUMP.								
				03/01/2012	M21	4060 PPM	VLV-PKG	03/01/2012	VLV-CL	3404.00	
				03/01/2012	M21	3404 PPM		03/02/2012	TBL	6.00	
				03/02/2012	M21	6 PPM					03/02/2012
2641.01	CONNECTOR/ FLANGE	4.00	22P81 W OF TK 98.S FLANGE								
				03/02/2012	M21	542 PPM	CON-FLG	03/02/2012	CON-CLA	722.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				03/02/2012	M21	722 PPM		03/02/2012	CON-CLA	65.00	
				03/02/2012	M21	65 PPM					03/02/2012
2645.01	CONNECTOR/ FLANGE	3.00	22P81 W OF TK 98.1FT N OF PUMP.S FLANGE.								
				03/02/2012	M21	4375 PPM	CON-FLG	03/02/2012	BOX	3243.00	
				03/02/2012	M21	3243 PPM		03/02/2012	CON-TF	140.00	
				03/02/2012	M21	140 PPM					03/02/2012
2656.01	CONNECTOR/ FLANGE	3.00	UNDERNEATH TK99 IN MIDDLE .TOP FLANGE.								
				03/01/2012	M21	1511 PPM	CON-FLG	03/01/2012	CON-CLA	1191.00	
				03/01/2012	M21	1191 PPM		03/02/2012	CON-CLA	7.00	
				03/02/2012	M21	7 PPM					03/02/2012
2657.03	CONNECTOR/ FLANGE	6.00	UNDERNEATH TK99 IN MIDDLE.N BTM FLANGE.								
				03/01/2012	M21	792 PPM	CON-FLG	03/02/2012	CON-CLA	17.00	
				03/02/2012	M21	17 PPM					03/02/2012
2659	VALVE/ ORBIT	4.00	UNDERNEATH TK190 NW SIDE.btw 99/190								
				03/01/2012	M21	1372 PPM	VLV-PKG	03/01/2012	VLV-CL	2054.00	
				03/01/2012	M21	2054 PPM		03/02/2012	TBL	27.00	
				03/02/2012	M21	27 PPM					03/02/2012
2666.01	CONNECTOR/ FLANGE	3.00	UNDERNEATH TK191 IN MIDDLE. TOP FLANGE.								
				03/01/2012	M21	1766 PPM	CON-FLG	03/01/2012	CON-CLA	874.00	
				03/01/2012	M21	874 PPM		03/02/2012	CON-CLA	150.00	
				03/02/2012	M21	150 PPM					03/02/2012
2878.02	CONNECTOR/ SCREWED	1.00	TOP OF TK96								
				03/02/2012	M21	2205 PPM	CON-SCR	03/02/2012	CON-CLA	1003.00	
				03/02/2012	M21	1003 PPM		03/02/2012	CON-TIG	24.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				03/02/2012	M21	24 PPM					03/02/2012
3023.03	CONNECTOR/ PLUG	0.50	3FT W OF TK 89 3FT N OF PUMP 22-P-36								
				03/06/2012	M21	542 PPM	CON-PLG	03/06/2012	CON-CLA	529.00	
				03/06/2012	M21	529 PPM		03/08/2012	CON-TPLG	20.00	
				03/08/2012	M21	20 PPM					03/08/2012
3548.01	CONNECTOR/ PLUG	1.00	BLW BTM SSD OF BULLET 89 5FT W OF BULLET 90								
				03/13/2012	M21	1170 PPM	CON	03/13/2012	CON-CLA	1735.00	
				03/13/2012	M21	1735 PPM					
3694.04	CONNECTOR/ 90	0.75	MDL OF RAIL LOADING RACKS ON 1ST PLTFM								
				03/07/2012	VIS	F	CON-90	03/07/2012	CON-CLA	8546.00	
				03/07/2012	M21	8546 PPM					
				03/07/2012	M21	6188 PPM		03/08/2012	CON-TCON	110.00	
				03/08/2012	M21	110 PPM					
3700.02	CONNECTOR	2.00	MDL OF RAIL LOADING RACKS ON 1ST PLTFM								
				03/07/2012	M21	23100 PPM	CON-SCR	03/07/2012	CON-CLA	22000.00	
				03/07/2012	M21	22000 PPM		03/08/2012	CON-CLA	5.00	
				03/08/2012	M21	5 PPM					03/08/2012
3700.03	CONNECTOR	2.00	MDL OF RAIL LOADING RACKS ON 1ST PLTFM								
				03/07/2012	M21	10800 PPM	CON-SCR	03/07/2012	CON-CLA	9854.00	
				03/07/2012	M21	9854 PPM		03/08/2012	CON-CLA	6.00	
				03/08/2012	M21	6 PPM					03/08/2012
3721.07	CONNECTOR	0.75	MDL OF RAIL LOADING RACKS ON 1ST PLTFM								

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
3721.07	CONNECTOR	0.75	MDL OF RAIL LOADING RACKS ON 1ST PLTFM								
				03/07/2012	M21	9201 PPM	CON-SCR	03/07/2012	CON-CLA	9560.00	
				03/07/2012	M21	9560 PPM		03/08/2012	CON-TIG	2.00	
				03/08/2012	M21	2 PPM					03/08/2012
3730.01	CONNECTOR/ SCREWED	0.75	MDL OF RAIL LOADING RACKS ON 1ST PLTFM								
				03/07/2012	VIS	F	CON	03/07/2012	CON-CLA	791.00	
				03/07/2012	M21	791 PPM					
				03/07/2012	M21	3072 PPM		03/08/2012	CON-CLA	9.00	
				03/08/2012	M21	9 PPM					
3732.02	CONNECTOR	0.75	MIDDLE OF RAILCAR LOADING RACKS 1ST PLTFRM .								
				03/07/2012	M21	1204 PPM	CON-90	03/07/2012	CON-CLA	2237.00	
				03/07/2012	M21	2237 PPM		03/08/2012	CON-TC ON	232.00	
				03/08/2012	M21	232 PPM					03/08/2012
3762	VALVE/ ORIFIC	0.75	IN PIPERACK 20FT NW OF 22V5.								
				03/07/2012	M21	6489 PPM	VLV-BON	03/07/2012	VLV-CL	11200.00	
				03/07/2012	M21	11200 PPM					
3797	VALVE/ PSV	0.75	IN PIPERACK 17FT SW OF 22P88 ON HP OUTSIDE SLOP LINE.								
				03/13/2012	M21	543 PPM	VLV-CONN EC	03/13/2012	VLV-CL	556.00	
				03/13/2012	M21	556 PPM					
3797.01	CONNECTOR/ SCREWED	0.75	IN PIPERACK 17FT SW OF 22P88 ON HP OUTSIDE SLOP LINE.								
				03/13/2012	M21	548 PPM	CON	03/13/2012	CON-CLA	634.00	
				03/13/2012	M21	634 PPM					
3958.01	CONNECTOR/ SCREWED	0.50	ON PUMP SEAL OF 22P87 12' W OF TK80								

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
3958.01	CONNECTOR/ SCREWED	0.50	ON PUMP SEAL OF 22P87 12' W OF TK80								
				03/15/2012	M21	21400 PPM	CON	03/15/2012	CON-CLA	14500.00	
				03/15/2012	M21	14500 PPM		03/16/2012	CON-CLA	10000.00	
				03/16/2012	M21	10000 PPM		03/29/2012	CON-REP	0.00	
				03/29/2012	VIS	P					
				03/29/2012	M21	3 PPM					03/29/2012
3958.02	CONNECTOR/ TUBCON	0.50	ON PUMP SEAL OF 22P87 12' W OF TK80								
				03/15/2012	M21	4167 PPM	CON-TUB	03/15/2012	CON-CLA	5109.00	
				03/15/2012	M21	5109 PPM		03/16/2012	CON-TCON	3100.00	
				03/16/2012	M21	3100 PPM		03/29/2012	CON-REP	0.00	
				03/29/2012	VIS	P					
				03/29/2012	M21	12 PPM					03/29/2012
3958.03	CONNECTOR/ SCREWED	0.75	ON PUMP SEAL OF 22P87 12' W OF TK80								
				03/15/2012	M21	908 PPM	CON	03/15/2012	CON-CLA	1104.00	
				03/15/2012	M21	1104 PPM		03/16/2012	CON-CLA	800.00	
				03/16/2012	M21	800 PPM					
3962.01	CONNECTOR/ TUBCON	0.50	ON PUMP 22P87 FROM SEAL @ VLV 10' W OF TK80								
				03/15/2012	M21	506 PPM	CON-TUB	03/15/2012	CON-CLA	562.00	
				03/15/2012	M21	562 PPM		03/16/2012	CON-TCON	14.00	
				03/16/2012	M21	14 PPM					03/16/2012
3962.02	CONNECTOR/ TUBCON	0.50	ON PUMP 22P87 FROM SEAL @ VLV 10' W OF TK80								
				03/15/2012	M21	232400	CON-TUB	03/15/2012	CON-CLA	158200.00	

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
3962.02	CONNECTOR/ TUBCON	0.50	ON PUMP 22P87 FROM SEAL @ VLV 10' W OF TK80								
						PPM					
				03/15/2012	M21	158200 PPM		03/16/2012	CON-TC ON	16.00	
				03/16/2012	M21	16 PPM					03/16/2012
3962.03	CONNECTOR/ TUBCON	0.50	ON PUMP 22P87 FROM SEAL @ TEE 10' W OF TK80								
				03/15/2012	M21	2692 PPM	CON-TUB	03/15/2012	CON-CLA	5467.00	
				03/15/2012	M21	5467 PPM		03/16/2012	CON-TC ON	145.00	
				03/16/2012	M21	145 PPM					03/16/2012
3962.05	CONNECTOR/ TUBCON	0.50	ON PUMP 22P87 FROM SEAL @ TEE 10' W OF TK80								
				03/15/2012	M21	2114 PPM	CON-TUB	03/15/2012	CON-CLA	2335.00	
				03/15/2012	M21	2335 PPM		03/16/2012	CON-TC ON	67.00	
				03/16/2012	M21	67 PPM					03/16/2012
3965.01	CONNECTOR/ FLANGE	3.00	ON PUMP 22P87 DISCHARGE LINE 12' W OF TK80								
				03/15/2012	M21	637 PPM	CON-FLG	03/15/2012	CON-CLA	821.00	
				03/15/2012	M21	821 PPM		03/16/2012	CON-TFL G	116.00	
				03/16/2012	M21	116 PPM					03/16/2012
3977	VALVE/ ORBIT	4.00	PUMP 22P86 SUCTION LINE 12' W OF TK80								
				01/19/2012	M21	19700 PPM	VLV-PKG	01/19/2012	VLV-CP	48700.00	
				01/19/2012	M21	48700 PPM		01/20/2012	VLV-TP	278.00	
				01/20/2012	M21	278 PPM					01/20/2012
3977	VALVE/ ORBIT	4.00	PUMP 22P86 SUCTION LINE 12' W OF TK80								
				02/23/2012	VIS	F	VLV-PKG	02/23/2012	VLV-CL	28500.00	
				02/23/2012	M21	28500 PPM					

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				02/23/2012	M21	76000 PPM		02/24/2012	VLV-TP	6.00	
				02/24/2012	M21	6 PPM					
				02/24/2012	VIS	P					02/24/2012
3977	VALVE/ ORBIT	4.00	PUMP 22P86 SUCTION LINE 12' W OF TK80								
				03/15/2012	M21	57700 PPM	VLV-PKG	03/15/2012	VLV-CL	119600.00	
				03/15/2012	M21	119600 PPM		03/16/2012	VLV-INJ	23.00	
				03/16/2012	M21	23 PPM					03/16/2012
3982.01	CONNECTOR/ UNION	0.50	PUMP 22P86 12' W OF TK80								
				03/14/2012	M21	516 PPM	CON-UNION	03/14/2012	CON-CLA	102.00	
				03/14/2012	M21	102 PPM					03/14/2012
3987.05	CONNECTOR/ TUBCON	0.50	PUMP 22P86 FROM SEAL @ TEE 12' W OF TK80								
				03/14/2012	M21	1255 PPM	CON	03/14/2012	CON-CLA	1151.00	
				03/14/2012	M21	1151 PPM		03/15/2012	CON-TCON	6.00	
				03/15/2012	M21	6 PPM					03/15/2012
4052	VALVE/ ORBIT	6.00	S SIDE TK82 TOP BLK								
				03/14/2012	M21	716 PPM	VLV-PKG	03/14/2012	VLV-CL	582.00	
				03/14/2012	M21	582 PPM		03/15/2012	VLV-TP	178.00	
				03/15/2012	M21	178 PPM					03/15/2012
4061	VALVE/ ORBIT	6.00	S SIDE TK83 TOP BLK								
				02/23/2012	VIS	F	VLV-PKG	02/23/2012	VLV-CL	11000.00	
				02/23/2012	M21	11000 PPM					
				02/23/2012	M21	14200 PPM		02/24/2012	VLV-TP	126.00	
				02/24/2012	M21	126 PPM					
				02/24/2012	VIS	P					02/24/2012

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
4061	VALVE/ ORBIT	6.00	S SIDE TK83 TOP BLK								
				03/14/2012	M21	2550 PPM	VLV-PKG	03/14/2012	VLV-CL	5950.00	
				03/14/2012	M21	5950 PPM		03/15/2012	VLV-TP	1.00	
				03/15/2012	M21	1 PPM					03/15/2012
4123.01	CONNECTOR/ FLANGE	3.00	N SIDE TK83 TOP CHAIN VLV								
				03/15/2012	M21	13500 PPM	CON-FLG	03/15/2012	CON-CLA	2290.00	
				03/15/2012	M21	2290 PPM		03/23/2012	CON-TF	205.00	
				03/23/2012	M21	205 PPM					03/23/2012
4221	VALVE/ ORBIT	6.00	TK 83 S SIDE BTM BLK UNDERNEATH								
				01/19/2012	M21	4723 PPM	VLV-PKG	01/19/2012	VLV-CP	1340.00	
				01/19/2012	M21	1340 PPM		01/20/2012	TBL	38.00	
				01/20/2012	M21	38 PPM					01/20/2012
4221	VALVE/ ORBIT	6.00	TK 83 S SIDE BTM BLK UNDERNEATH								
				02/23/2012	VIS	F	VLV-PKG	02/23/2012	VLV-CL	753.00	
				02/23/2012	M21	753 PPM					
				02/23/2012	M21	936 PPM		02/24/2012	VLV-TP	4.00	
				02/24/2012	M21	4 PPM					
				02/24/2012	VIS	P					02/24/2012
4249	VALVE/ ORBIT	4.00	TK 82 S SIDE BTM BLK UNDERNEATH								
				03/15/2012	M21	633 PPM	VLV-PKG	03/15/2012	VLV-CL	640.00	
				03/15/2012	M21	640 PPM		03/16/2012	TBL	23.00	
				03/16/2012	M21	23 PPM					03/16/2012

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 02

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed

Process Unit 02 Summary

	Component Count	Leak Count
Total in Group	68	73
Total Valves	19	24
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	49	49
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 05

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
16695	VALVE/ GATE	0.75	E OF CRUDE HTR LVL 1 @ 5V37 FLSH COL OF RECVR TOP SOUTH END OF SC	03/09/2012	M21	684 PPM	VLV-PKG	03/09/2012	VLV-CL	1064.00	
				03/09/2012	M21	1064 PPM		03/12/2012	VLV-CP	2.00	
				03/12/2012	M21	2 PPM					03/12/2012

Process Unit 05 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	1	1
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 09

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
T4353.11	CONNECTOR/ SCREWED	2.00	(TEMPORARY) E SIDE OF 9T15. S OF 9P67 BY STAIRS .	01/25/2012	VIS	F	CON-CONNEC	01/25/2012	CON-TCON	1983.00	
				01/25/2012	M21	1983 PPM		01/25/2012	CON-TCON	1195.00	
				01/25/2012	M21	1195 PPM		02/06/2012	CON-REP	0.00	
				02/06/2012	VIS	P					
				02/06/2012	M21	4 PPM					02/06/2012

Process Unit 09 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	0	0
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	1	1
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 12-21

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
15968	VALVE/ ORBIT	2.00	LOW PRESS RERUN TO VAPOR HEADER-12-12-12								
				02/02/2012	VIS	F	VLV-PKG	02/02/2012	VLV-CL	2285.00	
				02/02/2012	M21	2285 PPM					
				02/02/2012	M21	2511 PPM		02/08/2012	VLV-TP	5.00	
				02/08/2012	M21	5 PPM					
				02/08/2012	VIS	P					02/08/2012

Process Unit 12-21 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	1	1
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 29

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
30085	VALVE/ GATE	8.00	TOP OF 29T48A								
				01/04/2012	M21	579 PPM	VLV-PKG	01/04/2012	VLV-TP	557.00	
				01/04/2012	M21	557 PPM		01/05/2012	VLV-TP	32.00	
				01/05/2012	M21	32 PPM					01/05/2012

Process Unit 29 Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	1	1
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : 34

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
5037	VALVE/ WTR DRW	6.00	SOUTH SIDE TK116								
				01/11/2012	M21	3545 PPM	VLV-CAP	01/11/2012	VLV-CL	624.00	
				01/11/2012	M21	624 PPM		01/12/2012	VLV-CL	47.00	
				01/12/2012	M21	47 PPM					01/12/2012
5038	VALVE	6.00	EAST SIDE TK102								
				01/11/2012	M21	2427 PPM	VLV-CAP	01/11/2012	ATTB	6640.00	
				01/11/2012	M21	6640 PPM		01/12/2012	TBL	28.00	
				01/12/2012	M21	28 PPM		01/12/2012	VLV-TCAP		01/12/2012
5148	VALVE	12.00	EAST SIDE OF TK104								
				01/12/2012	M21	860 PPM	VLV-CAP	01/12/2012	VLV-TCAP	991.00	
				01/12/2012	M21	991 PPM		01/13/2012	VLV-TCAP	18.00	
				01/13/2012	M21	18 PPM					01/13/2012
5212	VALVE/ WTR DRW	8.00	NORTH SIDE OF TK108								
				01/13/2012	M21	1900 PPM	VLV-CAP	01/13/2012	VLV-CL	58.18	
				01/13/2012	M21	58.18 PPM					01/13/2012
5217	VALVE	6.00	SOUTH EAST SIDE OF TK108								
				01/13/2012	M21	701 PPM	VLV-CAP	01/13/2012	VLV-CL	173.00	
				01/13/2012	M21	173 PPM					01/13/2012
5244	VALVE/ WTR DRW	6.00	SOUTH WEST SIDE OF TK109								
				01/12/2012	M21	6452 PPM	VLV-CAP	01/12/2012	ATSC	4218.00	
				01/12/2012	M21	4218 PPM		01/13/2012	VLV-CL	17.00	
				01/13/2012	M21	17 PPM					01/13/2012
5261	VALVE	6.00	EAST SIDE OF TK109 @ CATWALK								
				01/12/2012	M21	905 PPM	VLV-CAP	01/12/2012	ATSC	835.00	
				01/12/2012	M21	835 PPM		01/13/2012	VLV-CL	7.00	

Process Unit : 34

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
				01/13/2012	M21	7 PPM					01/13/2012
5365	VALVE	6.00	SOUTH OF TK113								
				01/13/2012	M21	7325 PPM	VLV-CAP	01/13/2012	ATSC	8785.00	
				01/13/2012	M21	8785 PPM		01/16/2012	VLV-TCAP	14.00	
				01/16/2012	M21	14 PPM					01/16/2012
5829	VALVE	6.00	SOUTH WEST SIDE OF TK129								
				01/16/2012	M21	995 PPM	VLV-CAP	01/16/2012	ATTB	4.13	
				01/16/2012	M21	4.13 PPM					01/16/2012
5831	VALVE/ WTR DRW	6.00	NORTH EAST SIDE OF TK129								
				01/16/2012	M21	2359 PPM	VLV-CAP	01/16/2012	ATTB	3511.00	
				01/16/2012	M21	3511 PPM		01/17/2012	VLV-TCAP	7.00	
				01/17/2012	M21	7 PPM					01/17/2012
5881A	VALVE	6.00	NORTH SIDE OF TK126 NEAR CATWALK								
				01/16/2012	M21	11600 PPM	VLV-CAP	01/16/2012	ATTB	21400.00	
				01/16/2012	M21	21400 PPM		01/17/2012	VLV-TCAP	89.00	
				01/17/2012	M21	89 PPM					01/17/2012

Reporting Period 01/01/2012 - 03/31/2012

Process Unit : 34

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed

Process Unit 34 Summary

	Component Count	Leak Count
Total in Group	11	11
Total Valves	11	11
Total Pumps	0	0
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Process Unit : TERM

Tag Number	Part / Type	Size	Location	Monitor Date	Test Method	PPM Reading	Part Leaking	Repair Date	Repair Method	Remonitor Reading	Date Completed
30551	PUMP/ CENTRIF	0.00	PUMP AT AA-10 -2 TERM								
				03/27/2012	VIS	F	PMP-SEAL	03/27/2012	PMP-WS E	38200.00	
				03/27/2012	M21	38200 PPM					
				03/27/2012	M21	4216 PPM		03/28/2012	PMP-WS E	120.00	
				03/28/2012	M21	120 PPM					

Process Unit TERM Summary

	Component Count	Leak Count
Total in Group	1	1
Total Valves	0	0
Total Pumps	1	1
Total Compressors	0	0
Total Relief Valves	0	0
Total Connectors	0	0
Total Agitators	0	0
Total Other Equipment	0	0

Table 9
Michigan Refining Division
First Quarter End of Line Calculations

Q1 2012		S1 Sand Filter Effluent	S2 29T40/41	S3a Centrifuge Solids	S3b 29T12	S7 29T47	S4 Vacuum Truck	S5 Miscellaneous	S6 Spent Caustic	Monthly Total (kg)
January-12	Individual Sample Results (ppm)	0.01	373.33	0.25	1.00	--				
		0.03	113.33	0.10	2.50	--				
		0.01	260.00	27.33	2.50	--				
		0.15	206.67	0.04	2.50	3.93				
		0.06	286.67	0.31	1.00	12.00				
	Average Sample Results (ppm)	0.05	248.00	5.61	1.90	7.97				
	Waste Volume (gallons/month)	61,704,711	0	377,060	27,000	37,499				
	Waste Amount (kg)	233,916,951	0	1,429,400	73,593	142,155				
	Monthly EOL Benzene Quantity (kg)*	**12.65**	**0.00**	**8.02**	**0.14**	**1.13**	**23.54**	**4.12**	**0.28**	**49.88**
February-12	Individual Sample Results (ppm)	0.03	266.00	0.18	2.50	--				
		0.05	263.33	0.80	1.00	2.30				
		0.04	97.33	0.10	2.50	0.89				
		0.04	380.00	0.03	2.50	2.10				
	Average Sample Results (ppm)	0.04	208.89	0.36	2.00	1.60				
	Waste Volume (gallons/month)	61,925,779	0	164,406	0	19,748				
	Waste Amount (kg)	234,754,998	0	623,248	0	74,863				
	Monthly EOL Benzene Quantity (kg)*	**9.57**	**0.00**	**0.22**	**0.00**	**0.12**	**6.40**	**0.00**	**0.12**	**16.44**
March-12	Individual Sample Results (ppm)	0.07	120.00	0.50	2.50	57.08				
		0.06	266.67	0.03	1.37	44.33				
		0.12	126.67	0.08	2.50	0.40				
		0.00	116.67	0.04	0.83	0.24				
	Average Sample Results (ppm)	0.06	157.50	0.16	1.80	25.51				
	Waste Volume (gallons/month)	74,614,421	0	732,140	78,000	36,740				
	Waste Amount (kg)	282,856,486	0	2,775,476	212,602	139,278				
	Monthly EOL Benzene Quantity (kg)*	**18.08**	**0.00**	**0.45**	**0.38**	**3.55**	**46.54**	**0.00**	**0.05**	**69.05**
Quarterly Benzene totals (kg):		40.30	0.00	8.69	0.52	4.81	76.48	4.12	0.45	135.37

*For non-detect results, 1/2 the detection limit is used in the calculated quantity.

First Quarter EOL Benzene Quantity (Mg):	**0.13537**	**First Quarter EOL Benzene Quantity (Kg):**	**135.37**

Table 10
BWON Inspections - First Quarter 2012
Michigan Refining Division

Complex	Unit	Date	Service/Description	First Attempt	Recommended Fix	Final repair	Final Repair Date
5	34	1/11/2012	JB NW of Tank 113	Replace Lid	Replace Lid	Lid Replaced	1/26/2012
1	5	1/16/2012	BWON Used/Slop Oil Drum 1-1	Latch Lid	Latch Lid	Lid Latched	1/16/2012
1	5	1/16/2012	BWON Used/Slop Oil Drum 1-3	Latch Lid	Latch Lid	Lid Latched	1/16/2012
1	29	1/16/2012	API Roof Drains	Replace Drains	Replace Drains	Drains Replaced	1/30/2012
N/A	N/A	1/23/2012	BWON Used/Slop Oil Drum M-1	Latch Lid	Latch Lid	Lid Latched	1/23/2012
N/A	N/A	1/26/2012	BWON Used/Slop Oil Drum M-3	Latch Lid	Latch Lid	Lid Latched	1/26/2012
3	N/A	1/26/2012	BWON Used/Slop Oil Drum 3-2	Latch Lid	Latch Lid	Lid Latched	1/26/2012
1	29	1/31/2012	BWON Used/Slop Oil Drum 1-3	Caulk Pinhole	Caulk Pinhole	Pinhole Caulked	2/14/2012
5	34	2/20/2012	Water Draw N Side of Tank 128	Latch Lid	Latch Lid	Lid Latched	2/20/2012
N/A	29	2/23/2012	Access Hatch #41194	Latch Lid	Latch Lid	Lid Latched	2/23/2012
N/A	N/A	2/29/2012	BWON Used/Slop Oil Drum M-2	Latch Lid	Latch Lid	Lid Latched	2/29/2012
2	N/A	3/28/2012	BWON Used/Slop Oil Drum 2-3	Latch Lid	Latch Lid	Lid Latched	3/28/2012
1	N/A	3/29/2012	BWON Used/Slop Oil Drum 1-9	Latch Lid	Latch Lid	Lid Latched	3/29/2012
2	N/A	3/29/2012	BWON Used/Slop Oil Drum 2-4	Latch Lid	Latch Lid	Lid Latched	3/29/2012